# SMS Pilot Study / Gap Analysis Report

**The Talladega Municipal Airport (TMA)**

*Prepared for*

The Talladega Municipal Airport Board
Talladega, Alabama

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September 2009

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# EXECUTIVE SUMMARY:

In February 2007 the Federal Aviation Administration (FAA) issued Advisory Circular, (AC) 150/5200-37, *Introduction to Safety Management Systems (SMS) for Airport Operators*, to introduce the concepts of Safety Management Systems. The FAA has also opened a rulemaking project to consider formal requirements for SMS Title 14 Code of Federal Regulations (CFR) Part 139 (Part 139) certificated airports. In support of this rulemaking effort, the FAA has initiated a pilot program to assist airports in evaluating the development of an SMS specific to their situation and operations, and to share their acquired experience on SMS development and implementation with other airports and the FAA.

The Talladega Municipal Airport (TMA or Talladega) decided to take a leadership role in the development and implementation of a SMS at Airports by participating in the FAA pilot program. Thus, TMA was selected by the FAA to conduct an SMS pilot study. This document serves as the first deliverable to the FAA under the pilot study, outlining those areas of the SMS benchmarks listed herein where Part 139 and the FAA required Airport Certification Manual (ACM) at Talladega has strengths, vulnerabilities or gaps as compared to the AC. This is not intended to represent all areas typically found in a fully-capable SMS program; rather it specifically addresses those areas of interest to the FAA. This airport is one (if not the only one) selected that does not have day-to-day air carrier service.

Neel-Schaffer, Inc. (NSI) was selected in 2005 to provide engineering and planning services while serving as the *Consultant of Record* for Talladega, through 2010. The work associated with the preparation of the SMS Plan has been assigned to NSI by the Talladega Municipal Airport Board, and NSI is responsible in charge for the successful completion. By contract, ESIS, Inc. was chosen to assist both Talladega and NSI in performing the pilot study.

The gap analysis evaluates the gaps between Part 139 and the SMS expectations. The scores and comments are listed per the "Methodology" and FAA SMS proposed criteria. In some cases, Talladega exceeded their Part 139 requirements, further enhancing or closing the gap between Part 139 and SMS. In other cases, the SMS expectations were not fully realized when trying to implement Part 139 requirements. Refer to the Methodology section of this report for an explanation on the scoring and a reference to the evaluation criteria. The results of the SMS Gap Analysis are listed in Table 1, "Gap Analysis" section. The scores and comments do not necessarily indicate that Talladega is not complying with Part 139 FAA certification elements. Although an evaluation of performance to the Part 139 requirements was not part of this scope of work we have listed some as indicators of where implementing the SMS may enhance the effectiveness of Part 139 compliance. To summarize the Gap Analysis, the following represent the scores of the four FAA SMS Sections:

a) Safety Policy and Objectives, = 20%
b) Safety Risk Management, = 28%
c) Safety Assurance = 22%
d) Safety Promotion. = 28%

As defined by the AC 150/5200-37, SMS expectations are at time clearly communicated (e.g., Responsibility for assigning a Safety Manager) and at other times vague; such as establishing Objectives to achieve SMS or Investigations in Policy and Objectives. As a result, you will see in Figure 1, Section Methodology and Approach, that additional Elements were added to the SMS outline, to reflect some of the industry standards (again, pls see Methodology and Approach, Building the Gap Analysis) in regard to SMS. In particular, we added an element on Incident Investigations under Risk Management and Recognition under Safety Promotion, Encouragement. We also defined Business Integration under Safety Assurance to include preventative Maintenance and Emergency Preparedness. Safety Committees under Safety Policy and Objectives was not assessed because the Talladega airport does not have a committee. Associated criteria were added to these elements, again, based on industry standards (see Methodology and Approach).

As part of the Gap Analysis, a Perception Survey was also performed, to gauge the perception of management commitment and safety program performance on the part of the workforce. The results of the gap analysis are presented below in Table 1, and represent and overall strong perception that safety is important; its importance is communicated and considered a value in terms of Talladega airport operations.

**Table 1. Perception Survey Results**

| Category | Percent |
|---|---|
| Safety Policy and Objectives (SP&O) | 68 |
| Safety Risk Management (SRM) | 60 |
| Safety Assurance (SA) | 88 |
| Safety Promotion (SP) | 74 |

There was only one question that did not rank as a strength and that was “Safety Suggestions” (vulnerability). There were no “gaps” identified by the Perception Survey.

Therefore, based on the above, the findings and scores indicate that there is about a 20-25% overall agreement between what is required by Part 139, and future SMS expectations (75-80% gap). However, one element in particular registered a score of 60% (Inspections and Self-Auditing) and along with Requirements, was the highest of any of the Elements. The remainder of the Elements and Sections all showed “Gaps” as defined by this pilot assessment process.

# INTRODUCTION

In 2007 the FAA launched an airport pilot program in which 22 airports eligible to receive Airport Improvement Program (AIP) Grants participated in developing a pilot SMS program. Findings from this research resulted in a second round of pilot studies for smaller Class II, III, and IV airports (the first study focused on Class I airports) to continue research in support of possible FAA Rulemaking.

The goal of the pilot study is to identify how well Part 139 meets or exceeds the requirements of an SMS program. This pilot study's objectives are to review existing programs and processes for functioning elements of SMS. Other deliverables include developing a proposed Safety (Implementation) Plan to implement an SMS program.

# BACKGROUND

Talladega airport is located approximately 12 miles north of Talladega, Alabama. The Fixed Base Operator (FBO) is leased to North American Testing Company (NATC), owned by the city of Talladega and operated as a Class IV Airport. An Airport Advisory Board is appointed by the city council in an advisory capacity. Talladega has a general aviation (GA) terminal apron which is the only apron on the airfield available for unscheduled large air carrier aircraft (30 passengers or above).

Talladega is a GA airport for 50 weeks out of the year, and the other 2 weeks each year (during those weeks when major NASCAR events take place at the Talladega Super Speedway) the airport transitions from a rural GA airport to one of the busiest in the southeast. The FBO manages the overall airport facility, as well as a few businesses on site that support aviation activities at the airport. Normal hours of operation are between 7:00 am and 5:00 pm. Outside of these hours, the airport is unattended.

Talladega has been identified as the number one busiest small airport in the state of Alabama due to the two week race events and the growth of the community. The airport has grown because of the planning and cooperation of individuals, industry and government. The City of Talladega has a functioning Airport Advisory Board. The Airport Advisory Board is responsible for the activities and transactions of the Municipal airport for the city. The City of Talladega was deeded the airport property from the General Service Administration (GSA), through the FAA. Both GSA and FAA sets stringent restrictions and sets what can and cannot be done with the property. FAA recommended leasing property at the airport. The airport is approximately 1,100 acres; the runway, safety apron, taxiways, terminal, and hangers comprise the largest portion of the property. The airport board handles all the federal funds and makes recommendations as to the dispersion of the funds. All funds for the airport board operations, safety, improvements, and repairs come from the leases and federal matching funds.

The airport board has control of the requirements set by the FAA, as to the landing and take off of the aircraft glide paths, safety aprons, runways lighting, aircraft support systems, taxi ports, parking areas and etc. The FBO, NATC, leases the airport and is responsible for all incoming and outgoing aircraft, refueling, safety, etc. During race weekend, an air traffic controller is required in the tower to direct air traffic. Some 600 planes land and take off during that time.

Even though Talladega is a Part 139 airport without air carrier service, by the end of calendar year 2009 it will have a FAA-installed Instrument Landing System (ILS) in place. The ground-based instrument approach system provides precision guidance to an aircraft approaching a

runway, using a combination of radio signals and high-intensity lighting arrays to enable a safe landing during instrument meteorological conditions (IMC), such as low ceilings or reduced visibility due to fog, rain, or other inclement weather. Work is progressing towards obtaining approval of the ILS project. Talladega has been notified by FAA Southern region that the ILS work will be taking place in 2009. It is anticipated that the ILS will be ready for flight testing several months thereafter.

There is an expected transition from a Visual Flight Rules (VFR) operation to an Instrument Flight Rules (IFR) operation. The IFR will facilitate change in the airport mode of operation significantly, especially as it relates to air cargo operations. Currently, air cargo operations frequently occur at the airport in support of nearby industries such as: the Honda Motor Corporation's Lincoln, Alabama assembly plant, as well as the Anniston Army Depot. With these types of operations occurring throughout the year and with limited tower operators, except for race events, this would be extremely beneficial to Talladega. In general, IFR is an alternative to VFR, where the pilot is ultimately responsible for navigation, obstacle clearance and traffic separation using the *see-and-avoid* concept.

The airport has an established short-term and long range Capital Improvements Plan (CIP) in place, and it expects to continue meeting the goals of the CIP as it has over the past decade. The FAA and Alabama Department of Transportation (Aeronautics Bureau) have been very supportive of the airport as it has recently transitioned from a B-II to a C-II airport; providing several million dollars of support to the airport in order to make those changes.

The airport annual CIP has included the FY2009 Grant application recently submitted to the FAA. The items included not only items scheduled for implementation this year, but also the work that is associated with construction for a heavy-duty concrete apron, taxiway and an access road on the northwest end of the airfield. As part of the first half of FY2009's entitlement package (tentatively funded by FAA) plans are to complete the security fencing around the backside of the airport and remove the visual approach slope indicators systems (VASIS) and replace it with a precision approach path indicator (PAPI) now located on the airfield (This replacement will help enhance both approaches which will be tied to the final design of the ILS project). Not included in the application, but has been requested, are new Lighted Wind Cones (Primary and Supplemental; one at each end of the runway) and relocation of the Segmented Circle around the primary wind cones. Neel-Schaffer, Inc (NSI) provides engineering and planning services while serving as the Consultant of Records for the Talladega Airport. NSI provides oversight and coordination on CIP projects relating to current active TMA projects.

## *Organizational Structure*

The organizational structure at TMA is established by the size, complexity, and operation environment of a small general aviation organization. The Airport Manager has been designated as the focal point for implementation and maintenance of the SMS. While it is preferable with SMS for the airport manger to have no additional roles, this is not possible at Talladega Airport. The roles and responsibilities in the organizational structure for the safety at the Airport are presented in Exhibit 1.

The organizational responsibilities are disseminated throughout the airport personnel, thereby promoting a common understanding of everyone's role at TMA. Safety procedures are laid out by which the airport staff identifies and remedies safety risks during all activates at TMA.

## *TMA Roles and Responsibilities*

Management's role, responsibilities and accountabilities for the airport are defined and the lines of authority understood. Exhibit 1 below displays the line of succession of key participants in Talladega airport aviation safety process.

The Airport manager is accountable for establishing and maintaining the airport.

- Designate the manager in charge of each functional area for airport operations, for example, identify who is responsible for the implementation of safety within his functional area; and
- Maintaining a list of designate functional manager in charge of identifying and correcting organizational deficiencies identified during day to day operations and the race weekend events.

The Functional Agency representatives (i.e., fire department, security, emergency response, etc) and airport staff personnel in the organization are responsible for safety.

- Designated functional agency managers' has the responsible for managing safety of operations because he/she has the knowledge and expertise to recommend effective, corrective and preventive actions and has the authority to assign the appropriate resources where required.
- Airport staff assumes the responsibility for safety within their own area of responsibility (i.e., fueling, aircraft servicing, etc). In this way, he or she is involved in the "safety" process and is accountable for issues that arise in his or her functional area.

The TMA operational safety organizational structure is as follows:

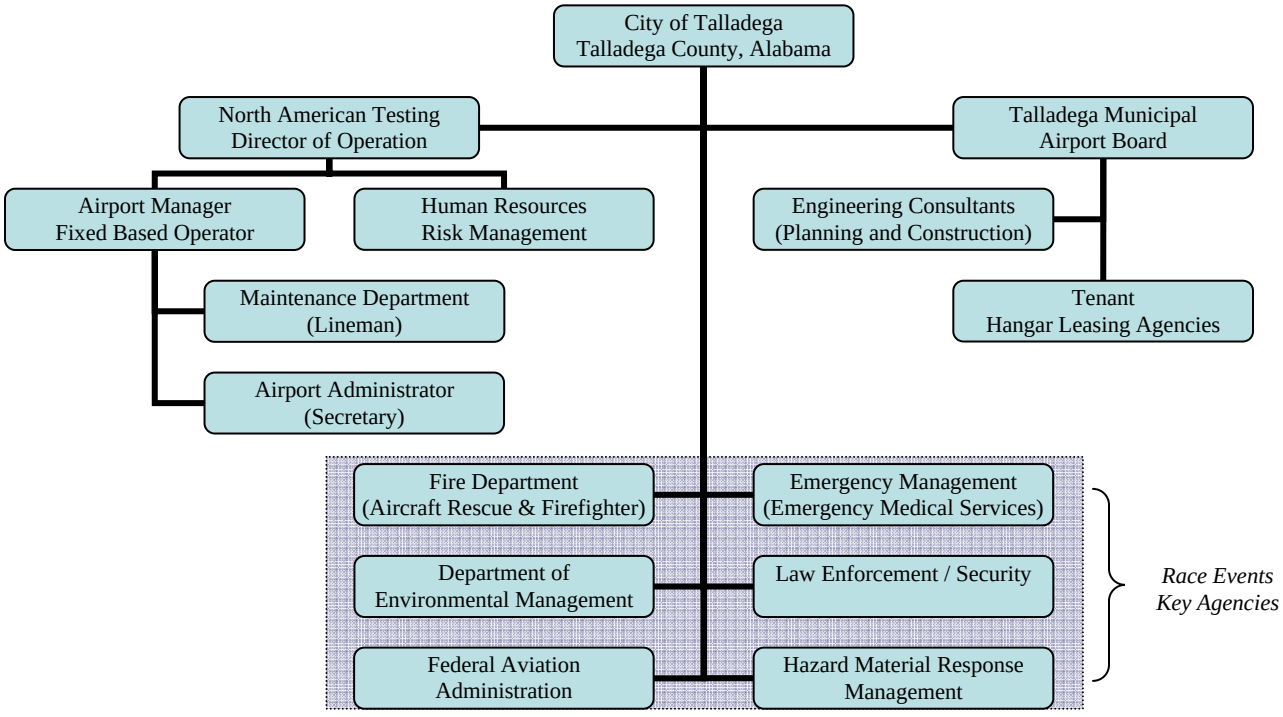


**Exhibit 1. TMA Operational Structure**

There are several Federal Government agencies that provide services to the Talladega Airport in case of an emergency, aviation incident and accident (especially during race events) or any other unforeseen event. The Regional Federal Aviation Administration (FAA), Federal Bureau of Investigation (FBI), National Transportation Board (NTSB) and National Weather Agency.

# METHODOLOGY AND APPROACH

The FAA published SMS guidance (AC) states that the SMS Manual and program should "…identify which elements of the airport operator's existing practices and guidance materials currently meet SMS requirements, which elements do not, and how these latter practices and documents will be revised in the future for consistency with an SMS Plan." The FAA requires a Gap Analysis or benchmark study to determine gaps in (a) Safety Policy and Objectives, (b) Safety Risk Management, (c) Safety Assurance and (d) Safety Promotion.

The approach to conducting the Gap Analysis at Talladega was to measure the ACM Part 139 requirements against the FAA SMS expectations and best practices. To accomplish this, ESIS reviewed the existing FAA SMS AC and compared it against the established industry SMS references (see below) with the result being the Gap Analysis review criteria listed in the SMS*Profile*™ (*Profile*). Thus, the Gap Analysis process included a document review, interviews with relevant staff and tenants and interactions and site visits within the airport itself. The document review focused on existing operations, organization documentation, and current ACM Part 139 procedures. The interactions during formal interviews, meetings, and discussions were to reach personnel at every level associated with the airport, including senior management, airport management staff, tenants and relevant city agencies associated with the airport operations during both race week and day-to-day operations. Some of the relevant department and agencies included:

- Talladega Airport Advisory Board
- Emergency Response including Aircraft Rescue and Firefighting (ARFF) staff
- Emergency Management Agency Representatives
- Public Safety and Security Staff
- Air Traffic Control Tower Representatives

Through the information gathered during the document review and personnel interviews we were able to assess the care of the airport's safety, the procedures they used in day-to-day operations and coordination efforts with outside agencies to perform an uneventful special raceway event twice a year. The goal was to verify that efforts are consistent and fully integrated and communicated among personnel at all levels.

## *Building the Gap Analysis Review Criteria (Profile)*

These four areas or Sections of the SMS were developed using the list of 25 elements referenced in the FAA (AC) 150/5200-37, Introduction to SMS for Airport Operators, dated February 28, 2007. The Gap analysis criteria was designed to cover all relevant SMS elements as described in FAA AC 150/5200-37. At the same time, the following are the referenced documentation used to build the gap analysis criteria:

- Airport Corporate Research Program (ACRP) Report 1, Volume 1, March 2007
- International Civil Aviation Organization (ICAO) SMM, Doc 9859, First edition-2006
- ICAO SMM, Doc 9859, Second Edition-2008 (Draft)

- ACRP Project 04-05, Volume 2, October 2008 (Draft)
- 14 CFR Part 139 Certification of Airports; Final Rule, February 2004
- Occupational Safety and Health Administration (OSHA) Directive CSP 03-01-003 TED 8.4, VPP Policies and Procedure Manual, March 2003
- OSHA Program Management Guidelines (PMG), Federal Register Notice 54:3904-3916, January 1989
- Occupational Health and Safety Assessment System (OHSAS) 18001, published by BSI, 2000 and 2007
- Occupational Health and Safety Management Systems ANSI Z10, Published 2005

Figure 1 presents the Sections and Elements of the Gap Analysis. Elements in Red were added to better align the International Civil Aviation Organization (ICAO) Safety Management Manual (SMM) with the above referenced industry standards.

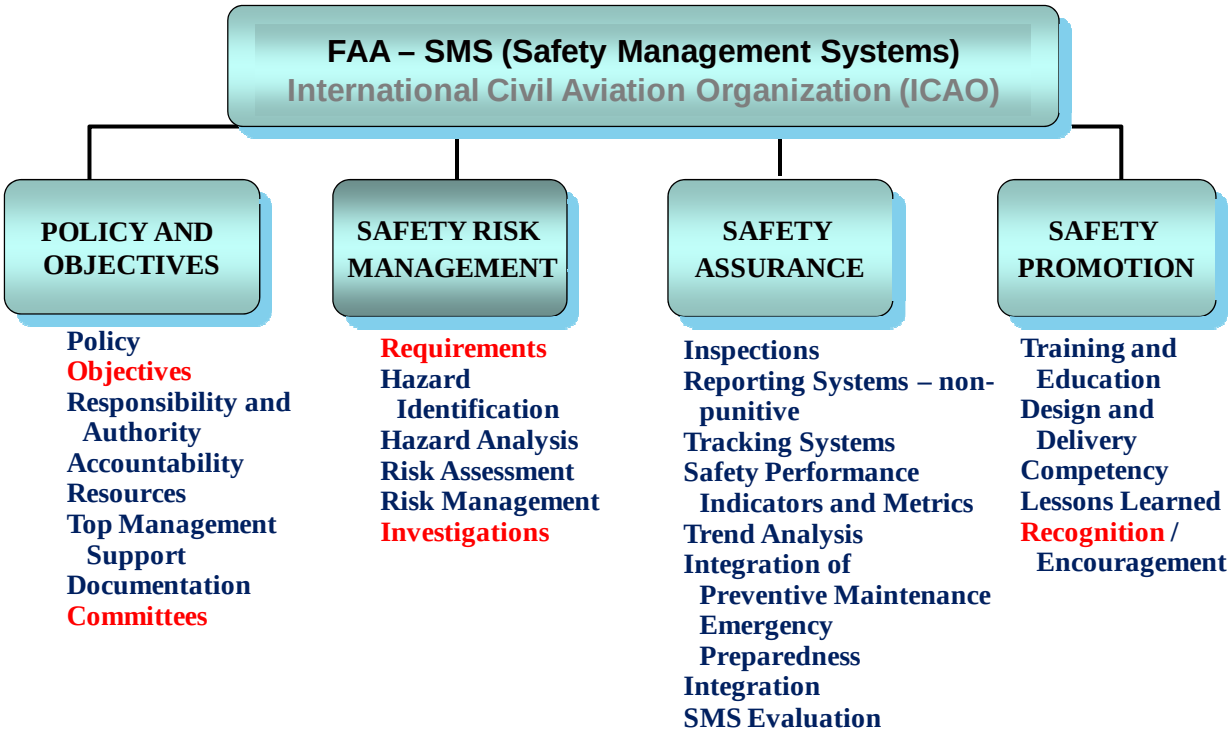


**Figure 1: Gap Analysis Sections and Elements**

## *Gap Analysis Process:*

The initial Gap Analysis undertook an assessment of the organizational capabilities at Talladega as it pertains to the guiding principals of SMS. The method of determining the existent capabilities considered a combination of stakeholder interviews, document search and review, and a preliminary operational review (observation). This process included review of over a hundred documents (record, forms, reports, inspection checklist, etc), interviews of key staff at

Talladega and on-site observations of several days on the ground at the airport monitoring operations, procedures, equipment and facilities.

ESIS also conducted a perception survey as part of the analysis. The survey was designed to help us better understand the effectiveness of the safety program and identify opportunities for improvement. It was entirely anonymous; we asked about individual's roles (e.g., front line leader/supervisor, manager, hourly paid employee or contractor) as well as safety process. See Attachments 1 – 3 for the Perception survey questions and results.

When referencing the airport ACM, it includes the Airport Emergency Plan (AEP) and the Security Plan. The team reviewed the following documents at Talladega:

- Part 139 Inspection Reports
- Airport Certification Manual (ACM)
- Airport Emergency Plan (AEP)
- Environmental Report
- Operations Daily Surveillance
- Emergency Response Reports
- Airfield Inspection Reports
- Talladega Organizational Chart
- Airport Security Plan
- Safety Incident Reports
- Airport Staff Training Records
- Airport Staff Performance Reports (extracts)
- Preventative Maintenance Records

Upon initial completion of the document review, the team met with the following staff and agency specific personnel to survey (see Attachment 4 - Schedule) current safety program status.

## *Scoring Process*

ESIS uses a qualitative and quantitative evaluation process. The four Sections consist of a number of elements, which we evaluated, scored with findings described with the *Profile* itself. The scoring process is consistent with a methodology used for over 15 years, which helps benchmark safety processes and efforts against equivalent level programs. Thus, for each criterion, there are five possible answers and points awarded:

- Does Not Meet 0 points = Not found
- Under Development 1 point = Beginning, documented but not implemented
- Partially Meets 2 points = implemented but missing in either documentation, consistency, thoroughness or effectiveness
- Meets 3 points, and
- Not Applicable null

Findings are recorded, as are Responses (R), Points Received (PR), and Points Available (PA). The points received are divided by the points available to yield a percentage score, based on a 0-100 scale.

Within each Element, points are totaled, and compared to the total points available, yielding a score from 0-100%. Based on over 300 surveys performed over the last 18 years, the scoring methodology is:

| **Scoring Methodology** | |
|---|---|
| **0-50%** | Gaps exist in the program, process, or effectiveness |
| **51-79%** | The program or process has some vulnerabilities in providing consistent, sustainable results |
| **80-100%** | While there still may be some recommendations for improvement, the overall program or process is effective in design and implementation. |

By combining a qualitative and quantitative gap analysis, relative strengths and weaknesses are not only better communicated, but better measured if true continuous improvement is made. This information is extremely valuable for the Implementation Plan deliverable.

## *Perception Survey*

The perception survey measures management's and employee's attitude towards safety at the airport and the level of motivation with regards to safety and health performance. Positive performance is based on key factors such as: 1) Safety Culture – which requires effective safety management and a commitment to safety on part of senior management; 2) Policy and Objectives – are employees familiar with the safety objectives and how to achieve the established targeted safety goals. These are only a couple of examples of the key factors focused on as part of the perception survey.

Prior to the on-site gap analysis, ESIS performed a "perception survey", to help collect grass roots indications of safety program implementation and management commitment and communication. This survey was offered to all employees, service personnel and others associated with the Talladega Municipal Airport, including the part time personnel that work race week, as well as airport tenants.

ESIS coordinated with the airport management staff to customize the perception survey to Talladega's organization and programs. ESIS tallied the information, analyzed the results and developed a report as well as assisted to interpret the data and make recommendations for improvement. The information gathered and reported included:

- Methodology, identification of management system strengths
- Overview summary of results
- Analysis by key sections, questions and/or demographics
- Recommendations based on combined statistics
- List of comments from participants

The team sent questionnaires (survey primers) to other key stakeholders, outside the airport organization, to gauge the level of SMS related activity outside the immediate domain of the airport (see attached survey form). For example, while tenant SMS capabilities are outside the scope, it is indeed useful to understand their work practices as it pertains to operations on the Talladega ramp, a key element of this study.

The Talladega FAA Safety Perception Survey was developed using the FAA guidelines (AC 150/5200-37) and standard SMS Components. Each question was developed and scores were compiled into the 4 main Components:

- Safety Policy and Objectives (SP&O)
- Safety Risk Management (SRM)
- Safety Assurance (SA)
- Safety Promotion (SP)

Questions are categorized to yield a better understanding of Talladega's Safety strengths and weaknesses. Participants rated each question ranging from 1 (weakness) – 5 (strength). An average of all responses was calculated along with the standard deviation for each questions response. Survey results are listed in Attachments 1-3.

# GAP ANALYSIS FINDINGS

As agreed upon, ESIS evaluated twenty-five (25) elements within the four (4) SMS components. ESIS' *Profile* is listed in Attachment 5, which includes the evaluation criteria, findings, scoring instructions, and summary score sheet. As the FAA SMS expectations are not yet established, it is not expected that TMA's safety program meet the SMS expectations.

Table 2 summarizes the findings:

| Table 2 Gap Assessment SMS | | |
|---|---|---|
| **–Section/ Element** | Assessment | **Comments** |
| **Safety Policy & Objectives (7)** | 20 % | |
| Policy | 3 % | Part 139 does not require a safety policy. Airport does not have a formal written safety policy statement. |
| Objectives | 19 % | Part 139 objectives are to ensure aircraft can safety land and depart without incident or accident, but do not require formal documented objectives. There are no formal safety objectives or targets written for the special race event or regular operations, even though safety is a primary concern of all parties. TMA uses a pre-race checklist as a guide to ensure that the airport is setup safely and operationally ready to handle aircraft at the race time. |
| Responsibility and Authority | 26 % | Part 139, Line of Succession of Airport operational responsibilities are required to be identified in the ACM. Talladega Municipal Airport Board has defined written responsibilities for the airport manager and key personnel. During race events, safety is supported and executed as a priority by NATC stakeholders (i.e., Talladega Speedway, NASCAR, etc) and Public Safety Agencies which provides fire rescue, medical care, security, environmental management, etc. |
| Accountability | 22 % | Part 139, Talladega ACM requires accountability of airport staff and key agencies to adhere to safety requirements. Accountability and authority are addressed in the ACM, Airport Emergency Plan and Security Plan which are coordinated and reviewed by all airport agency personnel. Airport Management has not established written procedures to hold staff accountable to any safety metrics, targets, or objectives. |
| Resources | 48 % | Part 139 and the airport ACM identify the resources required to operate the airfield to FAA requirements; such as aircraft rescue and line services equipment, personnel, and training. Funds are requested and allocated as needed for construction or maintenance on hangars by the Airport Board. Some resources are provided to maintain FAA standards. Resources are allocated to address race event expenses by NATC. Operational cost and airfield maintenance costs are the responsibility of the FBO. Airport staffing is increased dramatically (from 4 to over 50) for races. There are two elements of the Part 139 that have not been full implemented; recent Class IV requirements for ARFF live-fire training and an approved AEP. |
| Documentation | 22 % | Part 139 requires the airport ACM, which is a description of the system for maintaining records such as daily airfield self-inspections, training, quarterly fuel farm and mobile fuel truck inspections. Talladega has a manual (hard copy) system for recordkeeping of documentation. In addition, pre-event checklists are established for planning race events. The ACM is the documentation. |
| Committees | 0 % | Part 139 and ACM does not mandate a safety committee to be established. There is no designated or appointed committee that functions as a safety committee at the airport. |

| Table 2 Gap Assessment SMS | | |
|---|---|---|
| **–Section/ Element** | **–Section/ Element** | **–Section/ Element** |
| **Safety Risk Management (6)** | 28 % | |
| Requirements | 67 % | Part 139 and the airport ACM is the requirement for airport operation through daily airside surveillances. These are the primary regulatory drivers for an airport, however |
| Hazard Identification | 33 % | Part 139 and the ACM pre-identify a number of hazards and identify required controls. It does not prescribe a process to identify other hazards through an internal and external process. However, 1) Internally, the airport performs daily surveys (i.e., runway and taxiway markings, NAVAIDs, directional signs, lighting and fuel services operations to identify hazards associated with the airfield; 2) External hazard identification occurs annually by the FAA. For race weeks there are additional informal processes established; such as, a Pre-Race checklist that has been developed to identify potential hazards and areas of concerns prior to the event. The checklist is used as a proactive tool to ensure that the airport is set up safely and operationally to handle aircraft at the race time. No formal hazard identification written process is established. |
| Hazard Analysis | 13 % | Part 139 and the airport ACM does not require a hazard analysis to be performed beyond assessing emergency response activities. Race week provides experienced personnel to perform informal analysis process of airfield operations. Public safety and security, and emergency management performs worksite analyses specific to their operations prior to the race events. For example, emergency management and the fire department perform an analysis for the staging of vehicles to meet response time and personnel availability in case of an emergency. However, there is no documentation maintained at the airport. |
| Risk Assessment | 14 % | Part 139 and the ACM require undocumented risk assessments of airfield operations. For example; wildlife hazard management, airside obstructions, and foreign object debris (FOD). There is no formal written risk assessment procedures developed to risk rank hazard tasks or operations for subsequent risk reduction and control verification. Part 139 requirements are evaluated and performed by the FBO and the FAA. Rain water runoff and fuel spills are evaluated periodically by the Alabama Department of Environmental management (ADEM). |
| Risk Management | 17 % | Part 139 and the ACM does not require a formalize risk management process. Risk management concepts and processes are performed through daily and quarterly inspections that monitor compliance with Part 139 requirements. When a hazard or risk to an aircraft or facility is identified, procedures are in place to eliminate recurrence of hazards. For example; an unsatisfactory condition or hazard to an aircraft relating to the airfield may require a Notice to Airmen (NOTAMS) /Condition report to be transmitted and available to pilots. During race week, pre-checklists are communicated and close coordination between the stakeholders help improve the safe work procedures. The improvement of or addition to controls is not a documented target or objective. |

| Table 2 Gap Assessment SMS | | |
|---|---|---|
| **–Section/ Element** | **–Section/ Element** | **–Section/ Element** |
| Investigations | 20 % | Part 139 and the airport ACM address formal investigation procedures. As part of the AEP, actions are identified to be taken in case of an incident at the airport (i.e., aircraft accident, bomb incident, structural fire, nature disaster, etc.) Race event, incidents are investigated and documented when airport staff is informed. Accident reports are filed at the International speedway corporation in Daytona, Florida. Aircraft accidents are investigated and reports maintained by NTSB and FAA. Injuries and incidents are investigated and records are maintained by International speedway corporation (ISC) in Daytona, Florida. No formal written program is established for the airport. |
| **Safety Assurance (7)** | 23 % | |
| Inspections and Self-Auditing | 60 % | Part 139 and the ACM require procedures for conducting a self-inspection program. Daily inspections are conducted on the airfield and when an unusual condition is present, such as construction activities or meteorological conditions, which may affect safe aircraft operations. In addition, inspections occur immediately after an accident or incident. Daily ACM inspections are completed and documented. Terminal facility inspections are performed monthly. Findings are reviewed by the airport manager and followed-up to completion. No documented tracking system is established for terminal inspections. Non-regulatory controls identified by the Risk Assessment process have not yet been integrated into the inspection process. |
| Non-Punitive Safety Reporting | 11 % | Part 139 and the airport ACM do not address non-punitive safety or near-miss reporting. A work order system is in place during races; hazards are reported verbally. The airport submits work orders for carpentry, electrical and plumbing to NATC. Personnel are encouraged to report unsafe conditions. No formal mechanism exists for encouraging near-miss reporting. |
| Tracking Systems | 21 % | Part 139 and the airport ACM requires airside inspection to be performed and documented. The hazards identified by maintenance and operations are reported. Discrepancies or deficiencies are corrected on the spot or annotated to be tracked until completion. The airport maintains records for personnel training (emergency, fueling, and movement safety area), fueling agent inspections, self-inspection, accident and incidents, and airport conditions. During the race event, hazards are identified and corrected but not formally tracked unless placed in the work order system. |
| Performance Indicators | 0 % | Part 139 and the airport ACM identify performance by success of meeting the basic FAA goal – no accidents or incidents. No established system is in place to check leading performance indicators and targets or to address significant hazards, possible risks or lack of control implementation. Data is not collected for trending or establishing targeted goals or objectives. |
| Trend Analysis | 23 % | Part 139 and the airport ACM do not directly identify or require a trending process; however, the airport performs assessments of airfield operations. For example; wildlife hazard abatement for bird strikes (seasonal migrations) or aircraft accident reporting. Informally, management recognizes problem areas over time and implements preventative measures. Documented trending is not performed. Daily activity hazards are not fully identified or tracked where hazards are corrected on the spot. However for the SMS process, a system for trending to determine a logical approach to counteract the any change in risk to safe operations is not developed. |

| Table 2 Gap Assessment SMS | | |
|---|---|---|
| **–Section/ Element** | **–Section/ Element** | **–Section/ Element** |
| Integration (Maintenance / Emergency) | 37 % | Part 139 and the airport ACM identifies maintenance requirements of airfield equipment; both FAA and airport owned. Emergency procedures are addressed in the AEP. Safety critical equipment is inspected daily (i.e., fuel farm, fuel trucks, etc.) as identified by the ACM. Fire Extinguishers are inspected monthly by airport staff and every 6 months by an outside company prior to each race event. Emergency response activities, the FBO, and public safety agencies (medical, fire marshal, local police, etc) were involved in a recent airport emergency plan table top exercise review. |
| SMS Evaluation | 6 % | Part 139 and the airport ACM address some elements of the SMS during FAA evaluations (i.e., authority and training, organizational structure, self-inspections, documentation, emergency preparedness, etc). There currently is no system in place for critically reviewing and periodically evaluating all SMS elements. |
| **Safety Promotion (5)** | 28 % | |
| Training and Education | 48 % | Part 139 and the airport ACM is detailed and specific regarding airside training and education requirements. Curriculum for line services is conducted utilizing "NATA Safety First." For race events, familiarization training and orientation are provided by public safety agencies. The Fire department performs fire extinguisher training. Additional personnel (flagmen and aircraft marshallers) are trained on roles and responsibilities from NATA safety first. The training is documented and tracked for personnel other than airport staff employees. ARFF training records are maintained at the fire stations; however, it has been noted in the FAA report that the ARFF personnel have not received live-fire training. Additional training is required for incident commander, accident, and incident reporting. |
| Design and Delivery | 44 % | Part 139 and the airport ACM require a formal training program for ARFF personnel, fueling agents, pedestrians and ground vehicles in movement area and safety areas. All airside required training includes formal testing, scoring, and documentation. Race event safety training is informally conducted in the monthly meetings held by NATC. |
| Competency | 24 % | Part 139 and the airport ACM require personnel to be proficient and certified (i.e., live drills, air traffic tower operators, airfield hazard recognition). Evidence of continuous improvements for race events was noted, i.e., implementation of new radio system, increase in staff, live fire extinguisher training, and on-site claims investigators were added improvements. |
| Lessons Learned | 0 % | Part 139 and the airport ACM addresses lesson learned through events identified during surveys and evaluations. Some are available through government agencies, e.g., NTSB, FAA, EPA, and OSHA. There is no formalized process established for information to be communicated to the employees. Information is shared with airport staff as it relates to airport operations. |
| Recognition/ Encouragement | 24 % | Part 139 and the airport ACM do not formally promote or encourage safety participation or a recognition process. The Airport board does not provide award or incentive programs for safety reporting. NATC does not have a recognition program. Supervisors do provide verbal recognition for outstanding dedication to safety awareness during race events. Airport staff has been presented certificates of application and letters of appreciate from the Airport Board. Airport staff does feel moderately encouraged to report. |

The following information futher summarizes the above, and is based upon our document review, perception survey and interviews, and physical survey, as evaluated using the *Profile*:

## *Safety Policy and Objectives*

**Assessment**: Management Commitment to SMS (Written Policy and Objectives gapped)

| ***Safety Policy:*** | ***3%*** |
|---|---|

There is no formal safety policy statement established at Talladega Airport; however employees 68% feel management is committed to the safety of the personnel at Talladega Airport. There are no documents to state airport's commitment to meet the intent of an SMS program.

| ***Safety Objectives:*** | ***19%*** |
|---|---|

There are no formalized written safety goals and objectives to communicate to airport `employees. Talladega Municipal Airport Board has defined written responsibilities for all airport activities; however, objectives are not developed as a result of safety evaluations or observations, trend analysis, risk assessment, etc. Action plans to measure in terms of results have not been implemented. During race events, the attitudes, decisions and methods of operations demonstrate an emphasis given to safety.

| ***Responsibilities and Authority:*** | ***26%*** |
|---|---|

Safety responsibilities outside of the airport manager are not written in the job descriptions defining responsibilities across the organization. Airport staff and stakeholders demonstrated the authority to stop unsafe operations, especially during race week, according to over 90% of the personnel interviewed).

| ***Accountability:*** | ***22%*** |
|---|---|

There is no written guidance regarding safety accountability for top managers or key airport personnel. Performance appraisals did not show supervisors or hourly personnel accountable (e.g., measured) for safety and health responsibilities. Race events are agency specific; for example, the fire department is responsible for emergency rescue and fire response activities however performance is not quantified or qualified. There was no link between Accountability or Indicators and Targets.

| ***Resources:*** | ***48%*** |
|---|---|

Resources for Aircraft Rescue and Firefighting (ARFF) training have not fully been provided to meet Part 139 regulatory requirements. Resources have not yet been established to provide for data capture and analysis. Resources are allocated to address race event activities. Resources are made available, as demonstrated by the new fuel trucks and a generator.

Evidence of continuous improvements for race events was noted during the analysis, i.e., new radios, staff manpower increases, etc. Observation of some other equipment as well as survey results demonstrated the need for additional maintenance, such as: the ARFF truck repairs and tow vehicle for aircraft movement.

| ***Documentation:*** | ***22%*** |
|---|---|

The ACM requires and documents the various checklists used, including the pre-event checklist established for the preparation and planning of race events and maintenance checklists. There is no formal management of all required documents such as, spreadsheet of findings, scheduling calendar, etc. However, Talladega adheres to the established ACM that has mandatory documentation requirements for inspections and training; similar to the SMS process. ACM required records are to be maintained on file for a minimum of twelve consecutive months.

| ***Committee:*** | ***0%*** |
|---|---|

Not established. Talladega Municipal Airport has four (4) employees to operate and service the GA aircrafts and facilities and a number of tenant organizations. The Airport manager attends monthly safety meetings at the Talladega Speedway and provides feedback to the airport staff. There is no airport safety committee; however there is a City of Talladega Airport Board which has twelve members and includes outside stakeholders (Talladega speedway) that the airport manager can address safety concerns. The Airport Board is used in the advisory capacity for airport safety resources.

**Overall Assessment Policy & Objectives:** 20% and Red

Talladega provides a motivating force and the resources for the organization during race events. Due to the nature of the day-to-day operations performed by the FBO, line service personnel, and the small airport staff at the GA airport has not implemented a formal safety policy. There are no formally written Safety Policy and Objective statements regarding airport safety beyond the Part 139 requirements which include inspections, emergency response, and ARFF. Top managers' accountability for SMS has control of the financial and human resources required for the proper execution of their SMS responsibilities. There is no established safety policy manual or workers handbook containing policy statements. Although verbally communicated on a consistent basis, management has not set written safety goals, objectives, or targets for the airport personnel or tenants that lease the hangars at TMA. As expected, the established safety procedures and processes for the airport are governed around the Part 139 and ACM requirements. Airport Management has not been actively involved or encouraged participation in the safety process at all levels of airport operations. Organizational goals for the safety and health program have not been formally documented, communicated and measured so that all members understand the desired results or the measures planned for achieving them. There were limited organizational charts available to identify the relationship between Talladega staff, the NATC and the Airport Board, even as presented in the ACM. Performance appraisals and reports currently do not address safety roles and responsibilities. Currently no written guidance is established regarding accountability for safety indicators and targets. The organization consists of four personnel at the airport which is a airport manager, two lineman (aircraft fuelers) and a secretary. Safety concerns are addressed informally on a day to day base due to the structure of the organization. When additional focus or attention is required on a safety issue, the airport manager documents the concern and notifies the appropriate agency (i.e., Airport Board, NATC, Federal Agency Representative, Public Safety Agencies, etc).

## *Safety Risk Management*

**Assessment**: Manager's approach to Risk Management (Safety Risk Management gapped)

| ***Requirements:*** | ***67%*** |
|---|---|

Part 139 and the airport ACM is the requirement for airport operation. This includes daily airside surveillances. They are aware of other requirements, such as OSHA (occupational Safety and Health Agency) but they have not been incorporated in a safety manual, operating manual or list of requirements and assignments. This being said, there is accountability on the part of the Site manager to comply with all regulations, as well as the NCTA and Talladega city.

| ***Hazard Identification:*** | ***33%*** |
|---|---|

Part 139 and the ACM pre-identify a number of hazards and identify required controls. It does not prescribe a process to identify other hazards through an internal and external process. However, 1) Internally, the airport performs daily surveys (i.e., runway and taxiway markings, NAVAIDs, directional signs, lighting and fuel services operations to identify hazards associated with the airfield; 2) External hazard identification occurs annually by the FAA. For race weeks there are additional informal processes established.

| ***Hazard Analysis:*** | ***13%*** |
|---|---|

There is no documented hazard analysis process to follow, such as Job Hazard or Safety Analysis, Failure Modes and Effects Analysis, HAZ-Ops, fault trends, etc. Airport staff is not trained to conduct risk assessment review as it relates to analysis quality or control processes.

Race week employs experienced personnel to perform an informal analysis process. Associate public safety agencies (i.e., fire dept, law enforcement, and security) review operations for hazardous conditions and consideration. The Alabama Department of Environmental Management (ADEM) provides periodic inspections of the airport throughout the year to identify environmental concerns, but this is more of an inspection and not a hazard analysis program. There are no documented analyses performed on working conditions and operations to identify hazards not previously recognized by the aviation industry.

| ***Risk Assessment:*** | ***14%*** |
|---|---|

There is no structured process for the assessment of risk associated with identified hazards, expressed in terms of severity and probability of occurrence. Airport personnel are not trained to perform Job Hazard Analysis (JHA) or Job Safety Analysis (JSA). Personnel are qualified and trained to conduct assessments of their designated locations or area of expertise. Part 139 requirements help ensure airfield operational hazards are prioritized by impact of identified deficiencies and/or discrepancies noted during airfield inspection. No written risk assessment procedures exist to identify high hazard task or activities.

There are no formal hazard analyses or safe job procedures established. Operating Instructions or Standard Operating Procedures are not developed or maintained at the airport. Public safety agencies have specific procedures. TMA established race week pre-checklist provides communication and close coordination between the agencies (stakeholders) to help improve the safe work procedures. Personnel are informed during event orientation of changes in conditions and hazards associated with the workplace. No JHAs or written procedures are implemented; however, processes are in place and incorporated during races. The fire department, emergency management agency, security personnel, and airfield operators have PPE available on-site during race week.

| ***Risk Management:*** | ***17%*** |
|---|---|

There is no formal Safety Risk Management (SRM) process implemented. The Talladega Speedway provides a Risk Manager from the Dayton, Florida facility (Department level) to assist the airport and perform external audits. There are no trained risk assessments experts at the airport or on the speedway staff that document, track, or measure risk data. Training is tailored to workers that perform internal self-inspections as it relates to Part 139 requirements. The Part 139 (airfield surveillance, fuel and refueling operation, etc) and facility inspections are conducted daily to identify operational hazards. These inspections are performed by NATC and Talladega speedway staff personnel.

| ***Investigations:*** | ***20%*** |
|---|---|

Part 139 and the airport ACM address formal investigation procedures. As part of the AEP, actions are identified to be taken in case of an incident at the airport (i.e., aircraft accident, bomb incident, structural fire, nature disaster, etc. Race event, incidents are investigated and documented when airport staff is informed. Accident reports are filed at the International speedway corporation (ISC) in Daytona, Florida. Aircraft accidents are investigated and reports maintained by National Transportation Safety Board (NTSB) and the FAA. Injuries and incidents are investigated and records maintained by ISC. Talladega does not have established written investigation procedures to identify responsibilities, instructions, definitions and recordkeeping requirements. The airport uses Talladega Speedway Incident Report forms. During race event, airfield accidents are investigated by the NTSB or regional FAA staff. ISC investigators and United Services Administration (USA) adjusters are on site during race week. Talladega is considering having a full time investigator on site at all future race events for the airport operations. Airport staff is required to investigate minor airport incidents. Closure and causal factors are not identified, verified or trended. Airport staff has not had formal accident investigation training.

**Overall Assessment Safety Risk Management:** 28% and Red

During race events, there are reactive hazard identification mechanisms in place, such as passenger vehicle encroachments, aircraft wing walks/spotters positioning during aircraft towing and parking operations, or pedestrians having access to interfere/damage airfield lighting. Recording and analysis of hazards to establish additional controls are not formalized. There are proactive means of identifying and reporting hazards, such as daily self-inspections for Part 139 requirements, however, these inspections relate only to the airside, performed by trained

inspectors. There is no system established to prioritize task or activities outside of the Part 139 inspections. Race event participants are provided awareness training and briefed on hazards associated with specific jobs or tasks. Supervisors are actively involved during speedway races and safety violations are corrected on the spot during race events. Race events stakeholder collectively discuss risk factors associated with related operations. Standard Operating Procedures (SOPs) are not documented; unwritten rules are implemented and seem to be effective and clearly understood by participants. Talladega has had three minor aircraft incidents in the last twenty plus years during race events.

## *Safety Assurance*

**Assessment**: Managers safety oversight and practices (Safety performance indicators gapped)

| ***Inspections and Self-Auditing:*** | ***60%*** |
|---|---|

Talladega Speedway performs facility inspections and manually tracks results. The airport does not have a developed terminal/facility inspection checklist. Per ACM and Part 139 requirements, the airfield surveillance, fuel farm, and refuel operations are regulatory requirements that are being accomplished and documented, however the ramp area is not annotated on the checklist. Independent external inspections are performed by the FAA, the Chevron Fueling Company, and the (ADEM). During race events, public safety agencies (i.e., fire department, law enforcement, emergency management, etc.) conducts inspections prior to the race and the agency personnel are qualified in their particular field to help ensure safe operations during the event. For daily inspections, personnel receive refresher training as it relates to the ACM, runway incursions, self-inspections, and ramp communications.

Self-inspections are performed monthly throughout the year and increased during the major speedway events. External audits of the speedway are conducted by the NATC Headquarters Office in Daytona.

| ***Non- Punitive Safety Reporting:*** | ***11%*** |
|---|---|

The airport does not have an established formal non-punitive reporting system. A work order system is in place through Talladega Speedway, but it is used mainly prior to and during race week, but not on daily basis. Talladega's tenants primarily use verbal requests.

| ***Tracking System:*** | ***21%*** |
|---|---|

There is a centralized system to track some preventive maintenance and work orders, particularly during race week. However, other findings from periodic inspections, audits, incidents, near misses, observations and suggestions are not recorded. FAA Part 139 inspections are tracked and corrective actions are annotated on the self-inspection form with comments until the noted discrepancies are corrected. The Chevron Fueling Company and ADEM inspections are performed quarterly. Part 139 findings and corrective actions are not formally tracked, however documentation is filed relating to the airport responses to FAA.

| ***Performance Indicators:*** | ***0%*** |
|---|---|

Scorecards, leading metrics, or corrective action plans have not been implemented to provide safety performance indicators. Thus targets have not yet been established.

| ***Trend Analysis:*** | ***23%*** |
|---|---|

Part 139 and the airport ACM do not directly identify or require a trending process, however, the airport perform assessments of airfield operations. For example; wildlife hazard abatement for bird strikes (seasonal migrations) or aircraft accident reporting are tracked. Informally, management recognizes problem areas over time and implements preventive measures. Documented trending is not performed. Daily activity hazards are not fully identified or recorded where hazards are corrected on the spot. There are no trend analysis records maintained or shared with the airport board, therefore there is no product to drive annual action plans.

| ***Integration (Maintenance and Operations):*** | ***37%*** |
|---|---|

Due to the nature of day-to-day operations performed at the airport, FBOs are responsible for managing both operations and maintenance. Line serve, fuelers and maintenance personnel, are required to conduct the Part 139, Class IV type airport operational requirements. Safety critical equipment is inspected which include fuel farm and refuel trucks. Airfield surveillance is performed on the airfield areas; apron, ramp, and taxiway that includes signs/markings, lighting and associated equipment to ensure serviceable conditions. In addition, during race events, public safety agencies are responsible for safety critical equipment in their designated location.

The Talladega Emergency Plan (AEP) is in draft form and revisions are currently under consideration to ensure all Part 139 requirements are addressed. The AEP for the airport will be reviewed and approved by the FAA. Aircraft Rescue Firefighter (ARFF) training is required for first responders at the airport. Airport employees are not trained in emergency response as the airport relies on public safety departments during race events.

| ***SMS Evaluations:*** | ***6%*** |
|---|---|

As expected, a process to evaluate SMS elements is not yet in place. The FAA evaluates Part 139 requirements annually. Part 139 and the airport ACM address some elements of the SMS during FAA evaluations (i.e., authority and training, organizational structure, self-inspections, documentation, emergency preparedness, etc). There currently is no system in place for critically reviewing and evaluating all SMS elements periodically.

**Overall Assessment Safety Assurance:** 23% and Red

Daily ACM inspections are completed and documented. Safety performance indicators or targets are not developed to directly relate to airport safety. There are no published trend analysis data; informally management recognizes problem areas over time and implements measures for control. Procedures or processes are not established to review, measure, or monitor SMS performance on regular basis. However, there was evidence that safety considerations are taken to mitigate and /or reduce hazardous situations. For example, there were public and airfield safety concerns regarding fencing: wildlife hazards (e.g., deer and coyotes crossing runways/taxiways) and race event incident indicated a concern for higher fencing which the airport board has approved. Trend Analysis is not formally implemented; yet daily airside inspections provide an opportunity to identify hazards and hazardous activities. As mentioned earlier, there are no trend analyses records maintained or shared at the airport to drive an action plan. Emergency procedures were recently performed to review the newly drafted AEP. The review was constructive in identifying key players and lines of authority in the event of an emergency condition. When comparing the FAA Part 139 mandates to the SMS requirements the airport is accomplishing several of the SMS elements (i.e., authority and training, organizational structure, self-inspections, documentation, emergency preparedness, etc). There currently is no system in place for critically reviewing and evaluating all SMS elements periodically.

## *Safety Promotion*

**Assessment:** Manage safety training and education (Continuous improvement gapped)

| ***Training and Education:*** | ***48%*** |
|---|---|

Curriculum for FBO, line serves, fueling and refueling operations are conducted utilizing "NATA Safety First." Additional, training is provided by the airport manager using approved training curriculum for airfield operations. Airport staff personnel have not been required to take incident investigation or hazard recognition training. Additional training maybe warranted for airfield inspections and hazard recognition. Observations such as extraneous airfield markings and some inoperable directional sign lights indicate additional attention may be needed during the inspection process. No specific curriculum for employees is developed; therefore they are not conversant in SMS.

| ***Design and Delivery:*** | ***44%*** |
|---|---|

For fueling activities the airport uses a certified program. For safety presentations, Talladega brings in speakers for safety meetings. Live fire extinguisher training and on-site claims investigators were added improvements. Formal training programs include formal documentation of testing, scoring, and evaluation of line service training. The speedway provides training to the staff personnel at weekly management meetings. Safety is not the driving objective for the meetings; however various safety topics and courses are performed during the meetings.

| ***Competency:*** | ***24%*** |
|---|---|

Part 139 and the airport ACM require personnel to be proficient and certified (i.e., live drills, air traffic tower operators, airfield hazard recognition). Evidence of continuous improvements for race events was noted, i.e., live fire extinguisher training and on-site

claims investigators were added improvements. The airport operations and maintenance personnel have years of airport experience and an in-depth knowledge of the operations and tasks performed at the GA airport.

| ***Lesson's Learned*** | ***0%*** |
|---|---|

No formal processes exist for lesson's learned. For race events, there is a free exchange of safety information, across all areas and at all levels, both vertically and horizontally. It is actively promoted by Talladega management and facilitated by mechanisms and processes established by Talladega stakeholders. Some are available through government agencies, e.g., NTSB, FAA, EPA, and OSHA but these are not yet being used. There is no standing agenda where SMS-related issues are critically assessed and objectively discussed.

| ***Recognition / Encouragement:*** | ***24%*** |
|---|---|

There is no written recognition program. Neither the Airport board nor Talladega speedway has provided or budgeted for recognition, awards, or incentive programs. However, there is a culture led by top management where two-way communication is encouraged, based on the Perception Survey. In addition, Supervisors provide verbal recognition for outstanding dedication to safety awareness during race events. Since our initial assessment visit in December 2008, the Airport staff has been presented with certificates of appreciation and letters of recognition from the Airport Board. Airport staff does feel moderately encouraged to report.

## **Overall Assessment Safety Promotion:** 28% and Red

The Airport Manager provides current information and training relating to safety issues relevant to the specific operation of the airport. General training requirements for line servicemen is documented and maintained on the airport personnel; train-the-trainer type courses are provided. Curriculums are pre-established by an FAA approved course, "NATA Safety First". The course provides lesson plans, tests, and evaluations. Manual training files are developed for each airport employee to assist in identifying and tracking employee training requirements and verify that the personnel have received initial and recurring training. Feedback and sharing of lessons learned is not systematic. Additional training is provided by the speedway to the staff personnel at weekly management meetings. Safety is not the driving objective for the meetings; however various safety topics and courses are performed during the meetings. The Part 139 and the airport ACM require personnel to be proficient and certified; however there is no requirement established for a safety recognition program or encouragement process. These elements in the Safety promotion program will have to be addressed when establishing an SMS process. Perception surveys reveal that personnel perceive safety as being promoted and demonstrated during the race weeks.

## *Part 139 Observations*

Talladega maintains an ACM and has achieved an Airport Operating Certificate approved by the FAA required by today's regulatory requirements. Talladega is a Class IV airport and some of the ACM requirements were not required to be implemented until June 9, 2007, such as Subpart D – Operations, ARFF requirements.

Surveillance of the airfield inspection and review of the ACM revealed that the airport operations may not fully meet with all Part 139 ACM requirements, such as:

- Airport ACM did not contain sufficient information covering Aircraft Rescue and Firefighting (ARFF) coverage and operational requirements of 139.315, 317, and 319.
    - Airport did not have sufficient qualification ARFF personnel to meet the mandated requirement of section 139.319.
    - Firefighters assigned to airport duties were found to be in noncompliance with requirements to perform a live-fire drill initially and every 12 months.
- Required an approved Airport Emergency Plan (AEP), 139.325; draft under review.
- Marking, Signs, and lighting on airfield.
    - Taxiway Alpha 1 had three taxiing route signs that are inoperable. 139.311
    - Taxiway Alpha 4 was found to have a partial centerline painted with broken up asphalt on the taxiway area. 139.305
    - Taxiway Alpha 3 center line is painted through the holding position line and extraneous markings (pre-existing taxiing lines) exist on the taxiway area. 139.311
- Traffic and wind direction indicators were not located at the end of the runway and lights were unserviceable. 139.323

Physical discrepancies noted during the surveillance were corrected within a 24 hour period. ARFF requirements are still under review by the FAA.

# COST ESTIMATE:

Part of the requirement of this study was to develop a cost estimate for the implementation of FAA SMS at Talladega. Attachment 6 represents our estimate of this effort, represented both in terms of initial and ongoing. The initial is based on the man-hours that may be needed to establish and set up the process. The ongoing man-hours is based on maintenance of the SMS. These estimates are based on taking into account existing efforts. As the airport management gain more experience with the SMS, it is expected that the long term maintenance costs would go down another 50%. These figures are based on implementation strategies based on the SMS Safety Plan for Talladega.

The table below represents the summary man-hour cost estimate

| **Attachment 6 SMS Implementation Cost Estimate (In addition to current level of effort)** | | **Cost Estimate (Man hours)** | |
|---|---|---|---|
| **Section/ Element** | **Assessment** | **Initial** | **Ongoing** |
| **Safety Policy & Objectives (7)** | 20% | 68 | 68 |
| **Safety Risk Management (6)** | 28% | 340 | 200 |
| **Safety Assurance (7)** | 23% | 325 | 344 |
| **Safety Promotion (5)** | 28% | 220 | 108 |
| | TOTAL | 953 | 720 |

As you can see, implementation would take almost ½ person-year to implement, while long term it would take approximately 2 months of time annually to maintain.

# Comparison of ACM and SMS Elements Requirements:

In comparing the documents required by Part 139 and the ACM to an SMS expectation, the SMS expects more documentation of the implementation strategy, roles and responsibilities as well as an auditable set of records. In Table 3 below, we listed the ACM required documentation, and listed where this matches up to an SMS expectation.

**Table 3: Comparison: Documentation Expectations: Part 139 and SMS**

| Talladega Municipal Airport<br>Class IV Airport Certificate Manual (Elements) | Safety Management System (SMS)<br>Elements Requirements |
|---|---|
| **1. *ACM Section 303 Personnel.* Lines of succession of airport operational responsibility** | **1. Safety Policy and Objectives (Responsibility and Authority): Written guidance on safety authorities and responsibilities of key airport personnel. (AC 150/5200-37)**<br>**Safety Policy and Objectives (responsibility and Authority): SMS documentation related to Part 139 responsibilities would be incorporated into the ACM. (AC 150/5200-37)** |
| **2. *ACM Section 113 Deviation to Part 139 Requirements*. Each current exemption issued to the airport from the Part 139 requirements** | **2. N/A** |
| **3. *ACM Section 105 Inspection Authority.* Any limitations imposed by the Administrator** | **3. N/A** |
| **4. *ACM Section 325 Airport Emergency Plan (airport grid map).* A grid map or other means of identifying locations and terrain features on and around the airport that are significant to emergency operations** | **4. Safety Assurance (Integration / Emergency Preparedness): Emergency Response Planning for efficient transition from normal to emergency operations and return to normal operations. (ICAO SMM)** |
| **5. *ACM Section 331 Obstructions*. The location of each obstruction required to be lighted or marked within the airport's area of authority** | **5. N/A** |
| **6. *ACM Section 319 ARFF Operation requirements*. A description of each movement area available for air carriers and its safety areas, and each road** | **6. N/A** |
| **7. *ACM Section 301 Records*: A description of the system for maintaining records** | **7. Safety Policy and Objectives (Documentation) and Safety Assurance (Tracking Systems): It is important that the organization maintain a record (safety reporting records, surveys, hazard reporting forms, and risk analysis. (AC 150/5200-37)** |
| **8. *ACM Section 303 Personnel (training requirements).* A description of personnel training** | **8. Safety Promotion (Training): Documented process to identify training requirements. Process that measures the effectiveness of training. (AC150/5200-37** |

| Table 3: Comparison: Documentation Expectations: Part 139 and SMS | |
|---|---|
| **Talladega Municipal Airport<br>Class IV Airport Certificate Manual (Elements)** | **Safety Management System (SMS)<br>Elements Requirements** |
| **9. *ACM Section 305 Paved Areas.* Procedures for maintaining the paved areas** | **9. N/A** |
| **10. *ACM Section 307 Unpaved Areas.* Procedures for maintaining the unpaved areas** | **10. N/A** |
| **11. *ACM Section 309 Safety Areas.* Procedures for maintaining the safety areas** | **11.Safety Assurance (Integration of Maintenance)** |
| **12. *ACM Section 311 Marking Signs and Lighting.* Plan showing the runway and taxiway identification system, including the location/inscription of signs, runway markings, and holding position markings** | **12. “ “** |
| **13. *ACM Section 311 Marking signs and Lighting.* A description of, and procedures for maintaining, the marking, signs, and lighting systems** | **13. “ “** |
| **14. *ACM Section 315, 317, and 319 ARFF Index, Equipment and Agents, and Operational Requirements. A description of the facilities, equipment, personnel, and procedures for meeting th*e aircraft rescue and firefighting requirements** | **14. “ “** |
| **15. *ACM Section 113 Deviation to Part 39 Requirements (Statement in section 317 –ARFF requirement).* A description of any approved exemption to aircraft rescue and fire-fighting requirements** | **15.Safety Assurance (Integration of Emergency Procedures)** |
| **16. *ACM Section 321 Hazardous Materials.* Procedures for protecting persons and property during storing, dispensing, and handling of fuel and other hazardous substances and materials** | **16.“ “** |
| **17. *ACM Section 323 Traffic and Wind Indicators.* A description of, and procedures for maintaining, the traffic and wind direction indicators** | **17.“ “** |
| **18. *ACM Section 325 Airport Emergency Plan.* An emergency plan** | **18. Safety Assurance (Integration of Maintenance)** |
| **19. *ACM Section 327 Self-Inspection Program.* Procedures for conducting the self-inspection program** | **19. Safety Assurance (Integration of Emergency Procedures)** |
| **20. *ACM Section 339 Airport Condition Reporting.* Procedures for airport condition reporting** | **20. Safety Assurance (Inspections)** |
| **21. *ACM Section 325 Airport Emergency Plan (provides authority and responsibilities in case of an incident or accident).* Aircraft incident and accidents response** | **21. Safety Assurance (Tracking Systems)** |
| **22. ACM Section 325 Bomb incidents, including designation of parking areas for aircraft involved** | **22. Safety Assurance (Integration of Emergency Procedures)** |

| Table 3: Comparison: Documentation Expectations: Part 139 and SMS | |
|---|---|
| **Talladega Municipal Airport<br>Class IV Airport Certificate Manual (Elements)** | **Safety Management System (SMS)<br>Elements Requirements** |
| **23. ACM Section*325 Airport Emergency Plan (provides authority and responsibilities in case of an incident or accident)* Structure fires** | **23. Safety Assurance (Integration of Emergency Procedures)** |
| **24. ACM Section *325 Airport Emergency Plan (provides authority and responsibilities in case of an incident or accident)* Fires at fuel farms or fuel storage areas** | **24. Safety Assurance (Integration of Emergency Preparedness): Airports must develop an AEP and airlines must develop an Emergency Response Plan. (ICAO)** |
| **25. ACM Section *325 Airport Emergency Plan (provides authority and responsibilities in case of an incident or accident)* Hazardous materials / dangerous goods incidents** | **25. " "** |
| **26. ACM Section *325 Airport Emergency Plan (provides authority and responsibilities in case of an incident or accident)* Sabotage, hijack incidents, and other unlawful interference with operations** | **26. " "** |
| **27. *ACM Section 339 Airport Condition Reporting.* Failure of power for movement area lighting** | **27.Safety Assurance (Tracking Systems): Airport operator existing responsibilities for self-inspection and correction of discrepancies under 14 CFR Part 139, an effective airport SMS audit. (AC 150/5200-37). In the case of a major power outage, or loss of radar, communications or other major facilities. ICAO SMM** |
| **28. *ACM Section 105 Inspection Authority.* Any other item that the administrator finds is necessary to ensure safety in air transportation** | **28. Safety Policy and Objectives (Roles and Responsibilities)** |

As a result of this comparison, Part 139 and ACM requirements provide some of the documentation expected of an SMS, however, the majority of the implementation strategy and responsibilities are undefined, except for Inspections, Integration of Maintenance and Emergency Preparedness. Some other element of SMS, (i.e., Tracking Systems, Roles and Responsibilities) would only provide a few of the expected documentation. Overall, the documentation expectations of SMS would require the ACM to be enhanced quite a bit.

# CONCLUSION:

An SMS can provide an airport with the capacity to anticipate and address safety issues before they lead to catastrophic incident or accident. SMS provides management with the ability to deal effectively with accidents and near misses so that valuable lessons are applied to improve safety and efficiency. Research has shown that safety and efficiency are positively linked.

The ESIS Consulting team agrees with the results that the airport's ACM is supportive of SMS, however the reality is that only portions of the ACM can be directly adapted to SMS. An SMS implementation would add quite a bit of documentation and recordkeeping requirements, both initial and ongoing, to airport operations. However, in terms of ongoing activities and implementation, the SMS would tend to formalize and provide sustainability to Part 139 and ACM requirements, with the benefit of continuous improvement and a culture of prevention. An SMS, rather then burden the organization with unnecessary requirements, would help strengthen communication among airport organizations and personnel via a culture of prevention and continuous improvement.

Upon comparing ICAO and AC SMS expectations to other industry SMS standards (ANSI Z10, OSHA's VPP, OHSAS 18000, etc.), there are a number of gaps to the proposed FAA SMS. ESIS recommends that, at a minimum, FAA consider either adding or better integrating or expanding the concepts of:

- Safety Policy and Objectives: Objective setting based on Leading Trend Data and Performance Indicators.
- Safety Policy and Objectives: Safety Committee Expectations
- Safety Risk Management: Requirements
- Safety Risk Management: Incident Investigations and Root Cause Analysis.
- Safety Risk Management: Emphasize the Risk Management Portion, Especially in Terms of Continuous Improvement and Risk Reduction.
- Safety Promotion: Recognition and Encouragement

ESIS recommends that FAA refer to OSHA's VPP and ANZI Z 10 for better clarification of the above integration and expansion suggestions, in addition to the criteria ESIS used within our *Profile.*

This study also validates the comment presented during the SMS conference last October in Baltimore where it was stated "it would be more appropriate that Part 139 is part of SMS, rather than the other way around". The SMS is more comprehensive and more inclusive; assigning responsibilities to multiple organizations. SMS also better defines the expectations that safety efforts should be proactive and focus above and beyond minimum FAA requirements.

Talladega is a key part of the aviation industry, together with Talladega Super Speedway, Public Safety Agencies (FAA Air Traffic Controllers, Fire Departments, Emergency Management Agency, Police Departments, etc) and Federal Agencies (Federal Bureau of Investigation, NTSB, etc), the GA airport becomes more populated with small aircraft, automobiles, and people than any airport in the southern region. Through close coordinated efforts and effective planning all key players contribute to meet the high demands of the Speedway race events and the safety of all parties.

END OF REPORT

# Attachment 1

# Perception Survey – Raw Data Analysis

## Safety Policy and Objectives — Score 68%

**Question 5: How familiar are you with the safety objectives? At a level 5, the safety objectives are specific and measurable. Employees are aware of the safety objectives via regular communication from airport management.**

| | | | | | |
|---|---|---|---|---|---|
| **Total Responses** | **31** | inverse | 0.03225806 | | |
| Response | X1 | X2 | X3 | X4 | X5 |
| **Frequency** | **0** | **1** | **11** | **13** | **6** |
| Value | 1 | 2 | 3 | 4 | 5 |
| Product | 0 | 2 | 33 | 52 | 30 |
| Total Score | 117 | | | | |
| **Average** | **3.77** | | | | |
| **Std Dev** | **0.79** | | | | |
| Variance | 0.63 | | | | |

**Question 6: Do you know if the safety objectives are being met? At a level 5, employees are aware of the status of the safety objectives and the status is discussed by management.**

| | | | | | |
|---|---|---|---|---|---|
| **Total Responses** | **31** | inverse | 0.03225806 | | |
| Response | X1 | X2 | X3 | X4 | X5 |
| **Frequency** | **0** | **0** | **8** | **15** | **8** |
| Value | 1 | 2 | 3 | 4 | 5 |
| Product | 0 | 0 | 24 | 60 | 40 |
| Total Score | 124 | | | | |
| **Average** | **4.00** | | | | |
| **Std Dev** | **0.72** | | | | |
| Variance | 0.52 | | | | |

## Safety Risk Management — Score 60%

**Question 7: What is the overall condition of the tools, equipment and vehicles that you use on the job?At a level 5, employees should feel that the tools, equipment and vehicles are safe and in good repair.**

| | | | | | |
|---|---|---|---|---|---|
| **Total Responses** | **31** | inverse | 0.03225806 | | |
| Response | X1 | X2 | X3 | X4 | X5 |
| **Frequency** | **1** | **1** | **6** | **8** | **15** |
| Value | 1 | 2 | 3 | 4 | 5 |
| Product | 1 | 2 | 18 | 32 | 75 |
| Total Score | 128 | | | | |
| **Average** | **4.13** | | | | |
| **Std Dev** | **1.04** | | | | |
| Variance | 1.08 | | | | |

**Question 8: Have you ever participated in or been asked to provide suggestions for better control of safety hazards?**

| | |
|---|---|
| **Average** | **3.27** |
| **Std Dev** | **2.00** |
| Variance | 4.00 |

**Question 9: Do you think that serious hazards are controlled and that your work activities are safe?**
**At a level 5, employees should feel confident that hazards are being controlled and that risks are controlled or minimized.**

| | | | | | | |
|---|---|---|---|---|---|---|
| | **Total Responses** | **31** | inverse | 0.03225806 | | |
| Response | X1 | X2 | X3 | X4 | X5 | |
| **Frequency** | **0** | **0** | **5** | **12** | **14** | |
| Value | 1 | 2 | 3 | 4 | 5 | |
| Product | 0 | 0 | 15 | 48 | 70 | |
| Total Score | 133 | | | | | |
| **Average** | **4.29** | | | | | |
| **Std Dev** | **0.73** | | | | | |
| Variance | 0.53 | | | | | |

## Safety Assurance — Score 88%

**Question 11: How satisfied are you that management audits and inspects, so that hazards are identified and resolved quickly?At a level 5, employees feel that there is an effective auditing and inspection process to identify hazards and get**

| | | | | |
|---|---|---|---|---|
| **Total Responses** | **31** | inverse | 0.03225806 | |
| **Average** | **4.19** | | | |
| **Std Dev** | **0.74** | | | |
| Variance | 0.54 | | | |

**Question 12: How satisfied are you that management has a high value on safety?At a level 5, employees feel positively that management puts a high value on safety.**

| | | | | | | |
|---|---|---|---|---|---|---|
| | **Total Responses** | **31** | inverse | 0.03225806 | | |
| Response | X1 | X2 | X3 | X4 | X5 | |
| **Frequency** | **0** | **0** | **2** | **7** | **22** | |
| Value | 1 | 2 | 3 | 4 | 5 | |
| Product | 0 | 0 | 6 | 28 | 110 | |
| Total Score | 144 | | | | | |
| **Average** | **4.65** | | | | | |

| | |
|---|---|
| **Std Dev** | **0.60** |
| Variance | 0.36 |

**Question 13: Do you feel encouraged to report accidents, incidents and near-misses? At a level 5, employees feel encouraged to report accidents and incidents AND often do.**

| | | | | | |
|---|---|---|---|---|---|
| | **Total Responses** | **31** | inverse | 0.03225806 | |
| Response | X1 | X2 | X3 | X4 | X5 |
| **Frequency** | **0** | **1** | **2** | **6** | **22** |
| Value | 1 | 2 | 3 | 4 | 5 |
| Product | 0 | 2 | 6 | 24 | 110 |

| | |
|---|---|
| Total Score | 142 |
| **Average** | **4.58** |
| **Std Dev** | **0.75** |
| Variance | 0.57 |

## Safety Promotion — Score 74%

**Question 14: How satisfied are you that the information received at regular safety and health training (e.g. orientation, meetings, etc.) prepares you to do your job safely?At a level 5, employees receive safety training and are positive about**

| | | | | |
|---|---|---|---|---|
| | **Total Responses** | **30** | inverse | 0.03333333 |

| | |
|---|---|
| **Average** | **4.13** |
| **Std Dev** | **0.76** |
| Variance | 0.58 |

**supervisor for safe behavior, safety suggestions and hazard reporting? At a level 5, employees are positive about the safety encouragement and recognition they receive.**

| | | | | |
|---|---|---|---|---|
| | **Total Responses** | **29** | inverse | 0.03448276 |

| | |
|---|---|
| **Average** | **4.24** |
| **Std Dev** | **0.97** |
| Variance | 0.94 |

**Question 16: How satisfied are you with the personal protective equipment training you have received? Some examples of Personal Protective Equipment (PPE) would be gloves, goggles, safety toed shoes, respirators, etc.**

**At a level 5, employees feel comfortable that the PPE training they received helps them stay safe on the job.**

| | | | | |
|---|---|---|---|---|
| | **Total Responses** | **29** | inverse | 0.03448276 |

| | |
|---|---|
| **Average** | **4.24** |
| **Std Dev** | **0.97** |
| Variance | 0.94 |

**Question 17: How satisfied are you with regards to being trained to use tools and equipment safely?**
**At a level 5, employees are positive about the safe work procedures related to the tools and equipment that they use.**

| | | | |
|---|---|---|---|
| **Total Responses** | **29** | inverse | 0.03448276 |

| | |
|---|---|
| **Average** | **3.93** |
| **Std Dev** | **1.11** |
| Variance | 1.24 |

## Safety Policy and Objectives

| Years of Service | < 1 year | 1-5 years | 5-10 years | 10-20 years | > 20 years |
|---|---|---|---|---|---|
| **Scores:** | **50%** | **79%** | **58%** | **64%** | **No Data** |
| **Question 5** | | | | | |
| **Total** | 2 | 12 | 6 | 11 | 0 |
| **X4** | 1 | 5 | 0 | 7 | 0 |
| **X5** | 0 | 4 | 2 | 0 | 0 |
| **Question 6** | | | | | |
| **Total** | 2 | 12 | 6 | 11 | 0 |
| **X4** | 1 | 5 | 4 | 5 | 0 |
| **X5** | 0 | 5 | 1 | 2 | 0 |

## Safety Risk Management

| Years of Service | < 1 year | 1-5 years | 5-10 years | 10-20 years | > 20 years |
|---|---|---|---|---|---|
| **Scores:** | **67%** | **71%** | **78%** | **70%** | **No Data** |
| **Question 7** | | | | | |
| **Total** | 2 | 12 | 6 | 11 | 0 |
| **X4** | 1 | 2 | 2 | 3 | 0 |
| **X5** | 1 | 8 | 1 | 5 | 0 |
| **Question 8** | | | | | |
| **Total** | 2 | 11 | 6 | 11 | 0 |
| **Yes** | 0 | 5 | 5 | 7 | 0 |
| **Question 9** | | | | | |
| **Total** | 2 | 12 | 6 | 11 | 0 |
| **X4** | 0 | 2 | 4 | 6 | 0 |
| **X5** | 2 | 8 | 2 | 2 | 0 |

## Safety Assurance

| Years of Service | < 1 year | 1-5 years | 5-10 years | 10-20 years | > 20 years |
|---|---|---|---|---|---|
| **Scores:** | **100%** | **96%** | **83%** | **73%** | **No Data** |
| **Question 11** | | | | | |
| **Total** | 2 | 12 | 6 | 11 | 0 |
| **X4** | 1 | 5 | 2 | 5 | 0 |
| **X5** | 1 | 6 | 3 | 2 | 0 |
| **Question 12** | | | | | |
| **Total** | 2 | 12 | 6 | 11 | 0 |
| **X4** | 0 | 2 | 1 | 4 | 0 |
| **X5** | 2 | 10 | 5 | 5 | 0 |
| **Question 13** | | | | | |
| **Total** | 2 | 12 | 6 | 11 | 0 |
| **X4** | 1 | 0 | 1 | 4 | 0 |
| **X5** | 1 | 12 | 4 | 5 | 0 |

## Safety Promotion

| Years of Service | < 1 year | 1-5 years | 5-10 years | 10-20 years | > 20 years |
|---|---|---|---|---|---|
| **Scores:** | **100%** | **85%** | **63%** | **61%** | **No Data** |
| **Question 14** | | | | | |
| **Total** | 2 | 12 | 5 | 11 | 0 |
| **X4** | 1 | 6 | 0 | 5 | 0 |
| **X5** | 1 | 5 | 3 | 2 | 0 |
| **Question 15** | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Total** | 2 | 12 | 4 | 11 | 0 |
| **X4** | 0 | 3 | 0 | 3 | 0 |
| **X5** | 2 | 8 | 2 | 4 | 0 |
| **Question 16** | | | | | |
| **Total** | 2 | 11 | 5 | 11 | 0 |
| **X4** | 1 | 5 | 1 | 2 | 0 |
| **X5** | 1 | 4 | 2 | 4 | 0 |
| **Question 17** | | | | | |
| **Total** | 2 | 12 | 5 | 11 | 0 |
| **X4** | 1 | 3 | 2 | 4 | 0 |
| **X5** | 1 | 6 | 2 | 3 | 0 |

## Safety Policy and Objectives

| Race Week Only | Yes | No |
|---|---|---|
| **Scores:** | **64%** | **75%** |
| **Question 5** | | |
| **Total** | 21 | 10 |
| **X4** | 8 | 5 |
| **X5** | 4 | 2 |
| **Question 6** | | |
| **Total** | 21 | 10 |
| **X4** | 10 | 5 |
| **X5** | 5 | 3 |

## Safety Risk Management

| Race Week Only | Yes | No |
|---|---|---|
| **Scores:** | **68%** | **80%** |
| **Question 7** | | |
| **Total** | 21 | 10 |
| **X4** | 6 | 2 |
| **X5** | 10 | 5 |
| **Question 8** | | |
| **Total** | 20 | 10 |
| **Yes** | 9 | 8 |
| **Question 9** | | |
| **Total** | 21 | 10 |
| **X4** | 8 | 4 |
| **X5** | 9 | 5 |

## Safety Assurance

| Race Week Only | Yes | No |
|---|---|---|
| **Scores:** | **86%** | **85%** |
| **Question 11** | | |
| **Total** | 21 | 10 |
| **X4** | 10 | 3 |
| **X5** | 7 | 5 |
| **Question 12** | | |
| **Total** | 21 | 10 |
| **X4** | 4 | 3 |
| **X5** | 15 | 7 |
| **Question 13** | | |
| **Total** | 21 | 10 |
| **X4** | 5 | 1 |
| **X5** | 14 | 8 |

## Safety Promotion

| Race Week Only | Yes | No |
|---|---|---|
| **Scores:** | **71%** | **80%** |
| **Question 14** | | |
| **Total** | 20 | 10 |
| **X4** | 8 | 4 |
| **X5** | 7 | 4 |
| **Question 15** | | |

| | | |
|---|---|---|
| **Total** | 19 | 10 |
| **X4** | 5 | 1 |
| **X5** | 10 | 6 |
| **Question 16** | | |
| **Total** | 19 | 10 |
| **X4** | 6 | 3 |
| **X5** | 5 | 6 |
| **Question 17** | | |
| **Total** | 20 | 10 |
| **X4** | 7 | 3 |
| **X5** | 7 | 5 |

| Safety Policy and Objectives | |
|---|---|
| Only One RW | One |
| Scores: | 50% |
| Question 5 | |
| Total | 2 |
| X4 | 1 |
| X5 | 0 |
| Question 6 | |
| Total | 2 |
| X4 | 1 |
| X5 | 0 |

| Safety Risk Management | |
|---|---|
| Only One RW | One |
| Scores: | 67% |
| Question 7 | |
| Total | 2 |
| X4 | 1 |
| X5 | 1 |
| Question 8 | |
| Total | 2 |
| Yes | 0 |
| Question 9 | |
| Total | 2 |
| X4 | 0 |
| X5 | 2 |

| Safety Assurance | |
|---|---|
| Only One RW | One |
| Scores: | 100% |
| Question 11 | |
| Total | 2 |
| X4 | 1 |
| X5 | 1 |
| Question 12 | |
| Total | 2 |
| X4 | 0 |
| X5 | 2 |
| Question 13 | |
| Total | 2 |
| X4 | 1 |
| X5 | 1 |

| Safety Promotion | |
|---|---|
| Only One RW | One |
| Scores: | 100% |
| Question 14 | |
| Total | 2 |
| X4 | 1 |
| X5 | 1 |
| Question 15 | |
| Total | 2 |
| X4 | 0 |
| X5 | 2 |
| Question 16 | |
| Total | 2 |
| X4 | 1 |
| X5 | 1 |
| Question 17 | |

| | |
|---|---|
| **Total** | 2 |
| **X4** | 1 |
| **X5** | 1 |

## Safety Policy and Objectives

| Depts | Maintenance | Operations | Services (Terminal & Grounds) | Aircraft Response Firefighters (ARF) | Security | Loss Control | Other |
|---|---|---|---|---|---|---|---|
| Scores: | 50% | 70% | 68% | Insufficient Data | 33% | No Data | 33% |
| **Question 5** | | | | | | | |
| Total | 3 | 10 | 14 | 2 | 3 | 0 | 6 |
| X4 | 0 | 5 | 4 | 7 | 0 | 0 | 0 |
| X5 | 1 | 1 | 5 | 0 | 0 | 0 | 0 |
| **Question 6** | | | | | | | |
| Total | 3 | 10 | 14 | 2 | 3 | 0 | 6 |
| X4 | 2 | 6 | 6 | 2 | 2 | 0 | 2 |
| X5 | 0 | 2 | 4 | 0 | 0 | 0 | 2 |

## Safety Risk Management

| Depts | Maintenance | Operations | Services (Terminal & Grounds) | Aircraft Response Firefighters (ARF) | Security | Loss Control | Other |
|---|---|---|---|---|---|---|---|
| Scores: | 78% | 77% | 71% | 33% | 33% | No Data | 33% |
| **Question 7** | | | | | | | |
| Total | 3 | 10 | 14 | 2 | 3 | 0 | 6 |
| X4 | 0 | 2 | 4 | 0 | 1 | 0 | 3 |
| X5 | 1 | 5 | 6 | 0 | 2 | 0 | 2 |
| **Question 8** | | | | | | | |
| Total | 3 | 10 | 13 | 2 | 3 | 0 | 6 |
| Yes | 3 | 7 | 7 | 1 | 3 | 0 | 3 |
| **Question 9** | | | | | | | |
| Total | 3 | 10 | 14 | 2 | 3 | 0 | 6 |
| X4 | 1 | 3 | 5 | 1 | 3 | 0 | 3 |
| X5 | 2 | 6 | 7 | 0 | 0 | 0 | 2 |

## Safety Assurance

| Depts | Maintenance | Operations | Services (Terminal & Grounds) | Aircraft Response Firefighters (ARF) | Security | Loss Control | Other |
|---|---|---|---|---|---|---|---|
| Scores: | 100% | 95% | 93% | 50% | 33% | No Data | 33% |
| **Question 11** | | | | | | | |
| Total | 3 | 10 | 14 | 2 | 3 | 0 | 6 |
| X4 | 1 | 5 | 6 | 1 | 2 | 0 | 1 |
| X5 | 2 | 4 | 7 | 0 | 0 | 0 | 2 |
| **Question 12** | | | | | | | |
| Total | 3 | 10 | 14 | 2 | 3 | 0 | 6 |
| X4 | 1 | 3 | 3 | 0 | 2 | 0 | 1 |
| X5 | 2 | 7 | 11 | 2 | 0 | 0 | 3 |
| **Question 13** | | | | | | | |
| Total | 3 | 10 | 14 | 2 | 3 | 0 | 6 |
| X4 | 0 | 2 | 2 | 1 | 1 | 0 | 2 |
| X5 | 3 | 8 | 11 | 0 | 2 | 0 | 3 |

## Safety Promotion

| Depts | Maintenance | Operations | Services (Terminal & Grounds) | Aircraft Response Firefighters (ARF) | Security | Loss Control | Other |
|---|---|---|---|---|---|---|---|
| Scores: | 75% | 86% | 76% | 25% | 33% | No Data | 33% |
| **Question 14** | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Total** | 3 | 9 | 14 | 2 | 3 | 0 | 6 |
| **X4** | 0 | 5 | 4 | 0 | 2 | 0 | 3 |
| **X5** | 2 | 3 | 7 | 0 | 1 | 0 | 1 |
| **Question 15** | | | | | | | |
| **Total** | 3 | 9 | 13 | 2 | 3 | 0 | 6 |
| **X4** | 1 | 2 | 5 | 0 | 0 | 0 | 1 |
| **X5** | 2 | 6 | 7 | 0 | 2 | 0 | 2 |
| **Question 16** | | | | | | | |
| **Total** | 3 | 9 | 13 | 2 | 3 | 0 | 6 |
| **X4** | 0 | 4 | 4 | 1 | 0 | 0 | 1 |
| **X5** | 2 | 4 | 4 | 0 | 2 | 0 | 2 |
| **Question 17** | | | | | | | |
| **Total** | 3 | 9 | 14 | 2 | 3 | 0 | 6 |
| **X4** | 0 | 2 | 4 | 1 | 2 | 0 | 3 |
| **X5** | 2 | 5 | 6 | 0 | 1 | 0 | 1 |

# Attachment 2

# Perception Survey – Additional Comments Results

# Talladega FAA SMS Perception Survey

## Results Overview

Date: 1/20/2009 10:46 AM PST
Responses: Completes
Filter: No filter applied

| 10. What do you think could be controlled better?Please give us your suggestions for hazard and risk control. | |
|---|---|
| **#** | **Response** |
| 1 | Better PPE |
| 2 | The race fans. There should be a better way for the race fans to be held outside the terminal. Adn for the reace car drivers and their crew to be piced up at their planes and get to the track without interfeerance from the fans and the fans crowding in or outside of the terminal |
| 3 | Security gates |
| 4 | Better night time security |
| 5 | More equipment and training |
| 6 | Drivers wanting to go on tarmac to pick up racing personnel. |

# Talladega FAA SMS Perception Survey

## Results Overview

Date: 1/20/2009 10:47 AM PST
Responses: Completes
Filter: No filter applied

| 18. Are there any tools, equipment or tasks that you believe create an uncomfortable risk of damage or injury? Please use the box below to describe the tools, equipment or tasks. (This box is limited to 3500 characters) | |
|---|---|
| **#** | **Response** |
| 1 | Improper PPE for Aircraft Firefighting. |
| 2 | 16 |
| 3 | None |
| 4 | The 1986 GMC Pickup truck. |
| 5 | No |
| 6 | No |
| 7 | None |
| 8 | I am very happy with the equipment I use |
| 9 | No |
| 10 | some of the equipment could use updating for bettter serice of the customer. |
| 11 | Better night time lighting for the tarmat. We work late on Race nights and it's hard to see. Better reflective Vests. The gas crew should hava clolor, the fuel takers should have a color, etc. |
| 12 | We don't hae any and training is needed. |

# Talladega FAA SMS Perception Survey

## Results Overview

Date: 1/20/2009 10:47 AM PST
Responses: Completes
Filter: No filter applied

| 19. Additional Comments Please use the box below to provide any additional comments regarding this survey. (This box is limited to 3500 characters) | |
|---|---|
| **#** | **Response** |
| 1 | This survey was completed by Complete Car Wash Systems. |
| 2 | I work with contruction. Good to work with. Safety is stressed everday. Commuicates well and gives plenty of time and notice to safetyly prepare and/or move to safe place. |
| 3 | Other work I do is with Law Enforcement |
| 4 | I believe the staff does an excellent job of handling as many aircraft and people they do in a short amount of time of race week. With only one incident that I can recall, and that happened this past fall race. |
| 5 | Because of the high amount of traffic and personnel, there should be a safety meeting Saturdays during race weekend. |
| 6 | Runway Flagman |
| 7 | I think there ought to be a more secure lcoation for handling money. I think the airport manager and the rest of the crew do a really great job, especially for the race weekend and the stress that it brings. |
| 8 | We work hard during Race weekend. Long hours, but most of us enjoy the job. We like NASCAR & we like planes. Money could be better, but most of us don't do this job for the money. |

# Attachment 3

# Perception Survey – Overview Report

# Talladega FAA SMS Perception Survey

## Results Overview

Date: 1/20/2009 10:45 AM PST
Responses: Completes
Filter: No filter applied

Image - Talladega Municipal Airport

Image - For additional information please call 410-267-0531.



Please help us understand the level of safety at the Talladega Municipal Airport. Talladega Municipal airport is voluntarily participating in an FAA pilot study to evaluate safety progress. This survey is designed to help us better understand the effectiveness of our safety program and identify opportunities for improvement. It is entirely ANONYMOUS, which means that you should feel free to answer every question honestly without any concern that anyone will know what you answered. You will be asked to tell us about your role (e.g. front line leader/supervisor, manager, hourly paid employee or contractor). This will help us compare responses and perceptions by groups. Thank you in advance for your cooperation! - Jim Brock

**1.** Please select how long you have worked here (years)

| | | |
|---|---|---|
| Less than 1 year | 2 | 6% |
| 1-5 years | 12 | 39% |
| 5-10 years | 6 | 19% |
| 10-20 years | 11 | 35% |
| Greater than 20 years | 0 | 0% |
| Total | 31 | 100% |

**2.** Do you work Race Week only?

| | | |
|---|---|---|
| Yes | 21 | 68% |
| No | 10 | 32% |
| Total | 31 | 100% |

**3.** If you work Race Week only, how many have you worked? If you do not work Race Week ONLY, please select "More than one."

| | | |
|---|---|---|
| One | 2 | 6% |
| More than one | 29 | 94% |
| | 31 | 100% |

| | | | |
|---|---|---|---|
| | Total | | |

**4.** What department do you work in? Select all that apply.

| | | | |
|---|---|---|---|
| Maintenance |  | 3 | 10% |
| Operations |  | 10 | 32% |
| Services (Terminal & Grounds) |  | 14 | 45% |
| Aircraft Response Firefighters (ARF) |  | 2 | 6% |
| Security |  | 3 | 10% |
| Loss Control | | 0 | 0% |
| Other |  | 6 | 19% |

Safety Policy and Objectives - the safety policy for the Talladega Municipal Airport and safety objectives are written and include measurable targets to which the organization can improve. Questions 5 & 6 apply to Safety Policy and Objectives.

**5.** How familiar are you with the safety objectives? At a level 5, the safety objectives are specific and measurable. Employees are aware of the safety objectives via regular communication from airport management.

| | | | |
|---|---|---|---|
| Not al all | | 0 | 0% |
| Fair |  | 1 | 3% |
| Good |  | 11 | 35% |
| Excellent |  | 13 | 42% |
| Extremely |  | 6 | 19% |
| Total | | 31 | 100% |

**6.** Do you know if the safety objectives are being met? At a level 5, employees are aware of the status of the safety objectives and the status is discussed by management.

| | | | |
|---|---|---|---|
| Not al all | | 0 | 0% |
| Fair | | 0 | 0% |
| Good |  | 8 | 26% |
| Excellent |  | 15 | 48% |
| Extremely |  | 8 | 26% |
| Total | | 31 | 100% |

Safety Risk Management – is the recognition of hazards and the identification of prevention and control efforts. Questions 7 - 10 apply to Risk Management.

**7.** What is the overall condition of the tools, equipment and vehicles that you use on the job?At a level 5, employees should feel that the tools, equipment and vehicles are safe and in good repair.

| | | | |
|---|---|---|---|
| Unsafe | | 1 | 3% |
| | | 1 | 3% |
| | | 6 | 19% |
| | | 8 | 26% |
| Very safe | | 15 | 48% |
| | Total | 31 | 100% |

**8.** Have you ever participated in or been asked to provide suggestions for better control of safety hazards?

| | | | |
|---|---|---|---|
| Yes | | 17 | 57% |
| No | | 13 | 43% |
| | Total | 30 | 100% |

**9.** Do you think that serious hazards are controlled and that your work activities are safe? At a level 5, employees should feel confident that hazards are being controlled and that risks are controlled or minimized.

| | | | |
|---|---|---|---|
| Not controlled | | 0 | 0% |
| Fair | | 0 | 0% |
| Good | | 5 | 16% |
| Excellent | | 12 | 39% |
| All controlled | | 14 | 45% |
| | Total | 31 | 100% |

Safety Assurance - is the process used by management to ensure that risks are controlled. Questions 11 - 13 apply to Safety Assurance.

**11.** How satisfied are you that management audits and inspects, so that hazards are identified and resolved quickly? At a level 5, employees feel that there is an effective auditing and inspection process to identify hazards and get the hazards resolved quickly.

| | | | |
|---|---|---|---|
| Not at all | | 0 | 0% |
| | | 0 | 0% |
| | | 6 | 19% |
| | | 13 | 42% |
| Extremely | | 12 | 39% |
| | Total | 31 | 100% |

**12.** How satisfied are you that management has a high value on safety?At a level 5, employees feel positively that management puts a high value on safety.

| | | | |
|---|---|---|---|
| Not at all | | 0 | 0% |
| | | 0 | 0% |
| | | 2 | 6% |
| | | 7 | 23% |
| Extremely | | 22 | 71% |
| | Total | 31 | 100% |

**13.** Do you feel encouraged to report accidents, incidents and near-misses? At a level 5, employees feel encouraged to report accidents and incidents AND often do.

| | | | |
|---|---|---|---|
| Not at all | | 0 | 0% |
| Fair | | 1 | 3% |
| Good | | 2 | 6% |
| Excellent | | 6 | 19% |
| Very much | | 22 | 71% |
| | Total | 31 | 100% |

Safety Promotion – is the development of a positive safety culture which is essential to a sustainable safety management system. Training, communication and recognition are the means for promoting safety througout the location. Questions 14 - 17 apply to Safety Promotion.

**14.** How satisfied are you that the information received at regular safety and health training (e.g. orientation, meetings, etc.) prepares you to do your job safely?At a level 5, employees receive safety training and are positive about the training received and can give examples as to how the safety training helps them to continue to stay safe on the job.

| | | | |
|---|---|---|---|
| Not at all | | 0 | 0% |
| Fair | | 0 | 0% |
| Good | | 7 | 23% |
| Excellent | | 12 | 40% |
| Extremely | | 11 | 37% |
| | Total | 30 | 100% |

**15.** How satisfied are you with the amount of encouragement and recognition that you receive from your supervisor for safe behavior, safety suggestions and hazard reporting? At a level 5, employees are positive about the safety encouragement and recognition they receive.

| | | | |
|---|---|---|---|
| Not at all | | 0 | 0% |
| Fair | | 2 | 7% |
| Good | | 5 | 17% |
| | | | |

| | | | |
|---|---|---|---|
| Excellent |  | 6 | 21% |
| Extremely |  | 16 | 55% |
| | Total | 29 | 100% |

**16.** How satisfied are you with the personal protective equipment training you have received? Some examples of Personal Protective Equipment (PPE) would be gloves, goggles, safety toed shoes, respirators, etc. At a level 5, employees feel comfortable that the PPE training they received helps them stay safe on the job.

| | | | |
|---|---|---|---|
| Not satisfied |  | 2 | 7% |
| Fair | | 0 | 0% |
| Good |  | 7 | 24% |
| Excellent |  | 9 | 31% |
| Very satisfied |  | 11 | 38% |
| | Total | 29 | 100% |

**17.** How satisfied are you with regards to being trained to use tools and equipment safely? At a level 5, employees are positive about the safe work procedures related to the tools and equipment that they use.

| | | | |
|---|---|---|---|
| Not at all |  | 1 | 3% |
| Fair |  | 1 | 3% |
| Good |  | 6 | 20% |
| Excellent |  | 10 | 33% |
| Extremely |  | 12 | 40% |
| | Total | 30 | 100% |

Other input – is information that you would like to share that will help the Airport continually improve safety. Question 18 and 19 apply to Other Input.

Thank you for taking this survey and helping us to improve the airport safety.

# Attachment 4

# Talladega Schedule (On-site)

# FAA SMS BASELINE ASSESSMENT – ESIS, Inc. – Global Risk Control Services

| Day 1 Monday Time | Element *(Protocol ID)* | Department *(Documents – see attached Doc list)* | Person |
|---|---|---|---|
| **12:30 – 1:00** | Opening Meeting | Key Airport Management Staff | Jim Brock<br>James Smith |
| **1:00 – 2:30** | Airport Operations<br>*Familiarization* | Site tour and Orientation | Jim Brock |
| **2:30 - 3:30** | Safety Promotion<br>Training & Education<br>*Element 2.1, 4.1* | Line Serviceman Activity and Refueling | James Smith |
| **3:30 – 4:30** | Documentation Review<br>(Airport Certification Manual, Airport Emergency Plan, Federal Aviation Administration Report<br>Fixed Base Operator Reports i.e., Fuel Farm, Fuel Truck, Certificate of Insurances) | | |
| **4:30 – 5:00** | Daily Wrap Up and Status | | |
| **5:30 – 6:30** | Airfield Assessment<br>*Part 139* | Airfield Night Time Surveillance | Jim Brock |

We request 1 room for the duration of the visit where we will perform interviews and review documentation.
Please place as much of the requested documentation in this room upon our arrival.

# FAA SMS BASELINE ASSESSMENT – ESIS, Inc. – Global Risk Control Services

| Day 2 Tuesday Time | Element *(Protocol ID)* | Department *(Documents – see attached Doc list)* | Person |
|---|---|---|---|
| **8:30 – 9:00** | Inspections and Audits Servicing<br>*Element 2.5, 3.1, 3.4, 3.6* | Aircraft Maintenance | Harold Corlde |
| **9:00 – 10:00 Doc Review** | Safety Policy and Objectives<br>*Element 1.1, 1.2, 1.3, 1.7,*<br>Safety Performance and Resources<br>*Element 1.1,1.5, 3.4* | IMHOF Operations Manager<br>*(Safety Policy, Goals, Objectives)*<br>*Target and Indicators* | Bruce Ramsey |
| **10:00 –11:00 Doc Review** | Performance Appraisal, Discipline, Recognition<br>*Element 1.3, 1.4, 2.5, 3.4, 4.4, 5.5* | Airport Manager<br>*(Sample Appraisals)*<br>*(Appraisal process, Disciplinary Actions, and recent Awards)* | Jim Brock |
| **11:00 – 11:30 Site Survey** | Inspections and Audits and Aircraft Servicing<br>*Element 2.5, 3.1, 3.4, 3.6* | General Aviation Tenant<br>*( Hangar Inspections, Maintenance Reports)* | Jim Jackson |
| **11:30 – 1:00** | Working Lunch – Document Review & Completion of Protocol<br>Travel to Downtown Talledaga | | |
| **1:00 – 2:00** | Responsibility and Authority<br>Risk Management<br>Airport Board<br>***Offsite Visit*** | Attend City of Talledaga Board Meeting | Board Members |
| **2:00 – 2:30** | Responsibility and Authority<br>Risk Management<br>Airport Board<br>***Offsite Visit*** | Board Chairman<br>***Interview with Committee Chairman*** | Ray Miller |
| **3:00 – 4:30** | Accident Investigation, Hazard Identification, Analysis & Reporting System<br>*Element 2.2, 2.3, 3.1, 3.2* | Documentation Review<br>*(Airport Accident and Incident reports)* | Jim Brock |
| **4:30 – 5:00** | Daily Wrap Up and Status Check | | |

# FAA SMS BASELINE ASSESSMENT – ESIS, Inc. – Global Risk Control Services

| Day 3 Wednesday Time | Element *(Protocol ID)* | Department *(Documents – see attached Doc list)* | Person |
|---|---|---|---|
| **8:30 – 9:30 Doc Review** | Integration of Operations Preventative Maintenance Element *3.6* | Maintenance/ Facility manger *(Repair Records, Safety Work Orders)* | James Smith |
| **9:30 – 10:30** | Travel to Lincoln Fire Department and Observation of Fire Response Equipment ***Offsite Visits*** | | |
| **10:30 – 2:00** | Working Lunch – Discussion with major participants (include Special Event topics) Operations, Fire Department, EMA, Security, FAA Tower Representative | | |
| | Emergency Preparedness *Element 3.1, 3.6* Risk Management *Element 1.3, 2.1, 2* | **Airport Board Chairman:** Ray Miller<br>**City of Lincoln Fire Department**: Chief Mike Wesley<br>**State Fire Marshall:** Michael Haynes<br>**FAA Air Traffic Manager:** Bill Wagner<br>**Talladega Fire & Rescue:** Chief Danny Warwick and Captain Ronnie Davis<br>**Talladega Police Department:** Captain Thomas<br>**Talladega Speedway Security:** Director Bill Hodges and Major Ed Gardner<br>**Talladega Sheriff:** Bill Kennedy<br>**United Service Administrators (Insurance Adjustor):** Ernie Canfield | |
| **2:00 – 3:00 Doc Review** | Safety Promotion Training & Education *Element 2.1, 4.1* | Training Coordinator *(Examination & Attendance)* | Jim Brock |
| **3:00 – 3:30 Doc Review** | Lessons Learned *Element 1.3, 2.4, 4.4* | Accident Investigator *(Review 2 Incident Investigation, and Action Plans)* | Jim Brock |
| **3:30 – 4:30** | Hanger, Maintenance & Fuel Farm ***Onsite Visit*** | Talledaga Airport – Tenant Carwash & Talledaga Aero port Maintenance ***(Informal Interviews)*** | Steve Horne Harold Cordle |
| **4:30 – 5:00** | Daily Wrap Up and Status Check | | |

# FAA SMS BASELINE ASSESSMENT – ESIS, Inc. – Global Risk Control Services

| **Day 4 Thursday Time** | **Element** ***(Protocol ID)*** | **Department** ***(Documents – see attached Doc list)*** | **Person** |
|---|---|---|---|
| **8:00 – 10:00 Doc Review** | SMS Documentation *Element 1.3, 1.5, 1.7, 2.1, 2.4, 2.6, 3.7* | Airport Manager and Staff *(Data control, Records)* | Jim Brock |
| **10:00 – 12:00** | Wrap up Site Interviews | | |
| **12:00 – 1:00** | Working Lunch - Completion of Race Week Protocol and Evaluation Criteria Race Week Emphasis | | |
| **1:00 – 4:30 Doc Review** | Drafting of Gap Analysis Report<br>Drafting of Safety Plan | | |
| **4:30 – 5:00** | Daily Wrap Up and Status | | |

| **Day 5 Friday Time** | **Element** ***(Protocol ID)*** | **Department** ***(Documents – see attached Doc list)*** | **Person** |
|---|---|---|---|
| **8:00 – 9:00** | Exit Briefing | | |
| **9:00 – 10:00** | Draft Report Review | | |
| **10:00 – 4:00** | Return Travel | | |

***For the exit brief - In attendance (suggested): Airport Manager and Airport Staff.***

# Attachment 5

# Talladega – ESIS FAA SMS*Profile*™

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| **1.0 Policy and Objectives** | | *Section 1.0 (Policy and Objectives):* ***Provides the motivating force and the resources for organizing and controlling activities within an organization. In an effective program management regards worker safety and health as a fundamental value of the organization and applies its commitment to safety and health protection with as much vigor as to other organizational purposes. [PMG (b)(1)] . Commitment to SMS: Actions speak louder than works. If top management gives high priority to safety and health protection in a proactive manner, others will see and follow.*** | | | | | | | |
| **1.1 Policy** | | *Element 1.1 (Safety Policy): A statement of policy is the foundation of safety and health management. It communicates the value in which safety and health protection is held in the business organization. If it is absorbed by all in the organization, it becomes the basic point of reference for all decisions affecting safety and health. It also becomes the criterion by which the adequacy of protective actions is measured. [TED 8.4 CPTR III, II.C.1.a; Appendix E, Section I. B & C; Appendix F 4.2.2]* | | | | | | | |
| 1.1.1.1 | AC 150/5200-37 | D = Review policy manual, or worker handbook for policy statement. | Management's commitment to safety should be formally expressed in a statement of the organization's safety policy. | There is no formal safety policy statement established at Talladega Airport. | D | DNM | 0 | 3 | |
| 1.1.1.2 | ACRP 4-05 | I = Ask workers if they are aware of the policy (worker interview ).<br>V = Observe if policy statements are posted/published | Safety policy document to communicate to all employees. Other affiliated entities with a stake in organizational safety. | No written safety policy effectively communicated to airport employees. | I,V | DNM | 0 | 3 | |
| 1.1.1.3 | AC 150/5200-37 | I = Ask workers if they understand policy, and feel management's commitment is real | Establishment of clear standards of acceptable behavior related to safety. | There is no formal safety policy statement, however employees feel management is committed to the safety of the personnel at Talladega Airport. | I | UD | 1 | 3 | |
| 1.1.1.4 | ACRP 4-05<br>AC 150/5200-37 | D = Review policy for statement concerning safety as a value, not just a priority<br>I = Ask workers to compare the facilities commitment to safety with operations (worker interview ). | Executives are monitoring safety performance just as keenly as financial performance. A commitment to make safety the highest priority (not a priority, but a value) | Talladega Speedway, North American Testing Company (NATC), has an established safety policy for the company. (Documentation not provided). | D,I | DNM | 0 | 3 | |
| 1.1.1.5 | AC 150/5200-37 | D = Policy should reference a commitment to implement | A safety policy is signed by Top Management | No, Talladega airport does not have a policy letter signed by Top Management | D | DNM | 0 | 3 | |
| 1.1.1.6 | AC 150/5200-37 | D = Management's commitment to safety should be formally expressed in a statement of the organization's safety policy.<br>I = Worker. Ask is there a SMS policy. | Top Management involved in safety policy making. Policy reflects the organization's safety philosophy and become the establishment of the SMS. | Management committed to the goal of safety enhancement through application of SMS | D,I | DNM | 0 | 3 | |
| 1.1.1.7 | AC 150/5200-37 | D = Safety Policy<br>V = Verify Organizational Integration of Safety. | Policy should reference a commitment to SMS | No written policy established that would meet the intent of the Safety Management System (SMS) at the Airport. | D | DNM | 0 | 3 | |
| 1.1.1.8 | ACRP 4-05 | | Safety Policy must indicate how safety management principles will be integrated into the organizational structure and define the procedures necessary for a successful SMS implementation. | No written policy established that would meet the intent of the SMS. | D,V | DNM | 0 | 3 | |
| 1.1.1.9 | AC 150/5200-37 | | The policy should describe a commitment to continual safety improvement. | No written safety policy available. | D | DNM | 0 | 3 | |
| 1.1.1.10 | AC 150/5200-37 | | The policy should describe a commitment to provide safety resources | Talladega speedway policy needs to incorporate a commitment to provide safety recourses | D | DNM | 0 | 3 | |
| 1.1.1.11 | AC 150/5200-37 | | The policy should describe that employees can report safety issues without fear of reprisal. | No formal reporting process identified during visit; new policy should encourage airport personnel to freely report hazards. | D | DNM | 0 | 3 | |
| | | | | **Total:** | | | 1 | 33 | |
| | | | | **Score:** | | | *3%* | | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| **1.2 Objectives** | | *Element 1.2 (Goals and Objectives): Establish and communicate a goal for the safety and health program and objectives for meeting that goal, so that all members of the organization understand the results desired and the measures planned for achieving them. [TED 8.4 CPTR III, II.C.I; Appendix E, Section I.B; Appendix F 4.2.2]* | | | | | | | |
| 1.2.1.1 | ACRP 4-05 | D = Review the airport's published objectives. Objectives can be numeric or descriptive, better if both. Preferably one of the SMS elements. | A clear results oriented objectivel(s) for the safety and health program (SMS) has been established. Goals are meaningful and obtainable. [PMG(c)(1)(ii)] | No, airport does not publish goals and objectives that relate to SMS elements. A primary management focus is to ensure personnel and equipment are maintained and operated in a safe manner, especially during race events. | D | DNM | 0 | 3 | |
| 1.2.1.2 | AC 150/5200-37 | D = SMART. Specific, measurable, actionable, relevant and timely. | Objectives are meaningful and attainable. | There are no established objectives for the airport. | D | DNM | 0 | 3 | |
| 1.2.1.3 | CSP - IB2 | I = Ask employees what the objectives of the safety program is. (worker interview ) | The objectives for the safety program has been communicated to all members of the organization. | There are no formal objectives written for the special race event, however many plans and activities are directed towards safety of the event. Safety measures are communicated during planning and training stages prior to the race. Many people are involved in these planning stages. Although all are aware of safety requirements, no real measurable objectives were documented, other than additional observations such as facility inspections and bomb sweeping. | I | UD | 1 | 3 | |
| 1.2.1.4 | ACRP 4-05 | D = Doc. I = leadership | Management/Leadership owns the majority of these goals. | Undocumented goals: the Airport Manager and staff, which is the Fixed Base Operators (FBO), owns the majority of the goals of ensuring a safe working environment. There are no defined goals and objectives for such as the Airport Board or the City of Talladega. | D, I | UD | 1 | 3 | |
| 1.2.1.5 | AC 150/5200-37 | D = Doc. I = leadership | Goals are based on incident analysis, risk reduction, the self-assessment and other safety data analysis. | Airport has not established appropriate safety targets, goals, and/or indicators that would be used to guide the safety efforts of the organization. | D, I | DNM | 0 | 3 | |
| 1.2.1.6 | ACRP 4-05 | I = Ask workers and supervisors at all levels if they are aware of H&S objectives for their department, some committees, the site…<br>I = Ask workers at all levels if they are aware of safety | The majority of employees are aware of objectives, the results desired, and measures planned for achieving them. [PMG(c)(1)(ii)] | No written documentation found, yet airport staff understand the goal relating to safety of all activities such as fueling and refueling services. | I | UD | 1 | 3 | |
| 1.2.1.7 | AC150/5200-37 | D = Review written objectives and inventory accountable parties. The majority of objectives should not fall onto Safety and Maintenance. | Objectives are assigned to and spread among various departments and committees. | No, written objectives, however each department member interviewed demonstrated that they understand safety as primary goal during the race event. | D,I | UD | 1 | 3 | |
| 1.2.1.8 | AC 150/5200-37 | D = Look for a Scorecard documenting completion rates, etc. | Specific times for objectives to be met and be revisited to ensure effectiveness. | For the race events the specific objectives are based on the planned schedule, i.e. stakeholders recognize that they must have safety elements in place before and during the event. | D | UD | 1 | 3 | |
| 1.2.1.9 | AC 150/5200-37 | D = Look for a Scorecard documenting completion rates, etc. | The site regularly measures progress towards objectives. Goals are both measurable and descriptive relating to the SMS elements | No, airport does not measure goals or objectives that relate to SMS elements. | D | DNM | 0 | 3 | |
| | | | | **Total:** | | | 5 | 27 | |
| | | | | **Score:** | | | ***19%*** | | |
| **1.3 Responsibility and Authority** | | *Element 1.3 (Responsibility and Authority): Assign and communicate responsibility for all aspects of the program so that managers, supervisors, and employees in all parts of the organization know what performance is expected of them. Provide adequate authority and resources to responsible parties, so that assigned responsibilities can be met. [TED 8.4 CPTR III; II.C.2.a; Appendix E, Section I.D and Appendix F 4.2.2 and 4.2.3]* | | | | | | | |
| **1.3.1 Responsibilities** | | *Sub-Element 1.3.1 (Responsibility): Assignment of responsibility for safety and health protection to a single staff member, or even a small group, will leave other members feeling that someone else is taking care of safety and health problems. Everyone in an organization has some responsibility for safety and health, especially those in line management, who ultimately control what workers do, the tools they use, etc.* | | | | | | | |

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 1.3.1.1 | AC 150/5200-37 | D = Policy and Objectives. Review written guidance.<br>I = Leadership | Organization's policy concerning responsibility and accountability, including written guidance regarding the safety authorities and responsibilities of all key personnel assigned to the airport. | Resolution No 2211 establishes and creates the Talladega Municipal Airport Board. Talladega Municipal Airport Board has defined written responsbilities for "all activities and transactions of the municiple airport for the City of Talladaga." With regard to SMS this includes " the Board handles all the federal funds and makes recommendations as to dispersions of the funds. All funds for the Airport Board operations, safety, improvments and repairs..." "Day by day, the Airport Board has control of all the requirements that the FAA sets, as to the landing and takeoff of aircraft, their guide path, safety aprons, runway lighting, aircraft support systems, taxiports, parking areas, and etc... " The FBO is the North American Testing Company. This means that the North American Testing Company Leases the airport and is responsible for all in coming and outgoing aircraft, refueling, safty and etc. which is required by FAA laws and is the responsiblitity of the Fixed Based Operator." Limited operational responsibilities are defined within the Airport Certification Manual for key personnel of the FBO. Authority for safety decisions are not clearly defined. NATC does not have defined, written orgainizational responsibilities and accontabilities with regard to airport activites in both the race event and the day to day operations. | D,I | PM | 2 | 3 | |
| 1.3.1.2 | AC 150/5200-37 | D = Documentation of Senior management reviews<br>I = Leadership. Review consist of not only the financial performance of the organization but also its safety performance. = | Executives and Managers commitment to safety on the part of senior management. The attitudes, decisions and methods of operation at the policy-making level demonstrate the priority given to safety. | During racing events, the attitudes, decisions and methods of operations demonstrate the priority given to safety. Examples include multiple public safety agencies are involved including police, fire, medical, emergency management, etc. However, for day to day airport operations there is no clearly defined commitment to safety from executives or managers which includes the Airport Board, NATC, TSS that should be safety policies, programs or objectives. | D,I | UD | 1 | 3 | |
| 1.3.1.3 | AC 150/5200-37 | D = Executives and managers decision making process.<br>I = Leadership | Managers decisions and methods of operation at the policy-making level demonstrate a priority given to safety. | During race events, safety is demonstrated and executed as a priority. However, policy-making decisions are often based on financial business. | D,I | UD | 1 | 3 | |
| 1.3.1.4 | AC 150/5200-37 | D = Organizational chart. Succession of control<br>V = Distribution of responsibilities throughout airport staff.<br>I = Safety Manager and Staff personnel. | Airport organizational chart should be distributed as necessary to educate and inform the airport staff. | Limited organizational chart are identified in the ACM and AEP. Organizational chart includes the Airport Board and the relationship of the North American Testing Company management structure. Chart should be posted or communicated during race events. | D,V,I | UD | 1 | 3 | |
| 1.3.1.5 | AC 150/5200-37 | D = Safety Mangers roles and responsibilities.<br>I = Safety Manager and Staff | The responsibilities of the Safety Manager are clearly defined along with identified lines of communication within the organization. | There is no Safety Manager position defined . | D,I | DNM | 0 | 3 | |
| 1.3.1.6 | AC 150/5200-37 | D = Safety Manager communicate lessons learned from events.<br>I = Worker. Are lessons learned distributed. | Lessons learned from hazardous occurrence investigations and case history or experiences, both internally and from other organizations. | No formal process in place | D,I | DNM | 0 | 3 | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 1.3.1.7 | AC 150/5200-37 | I = Worker. Ask worker if airport operator/safety manager communicate safety goals and procedures.<br>V = The safety management system should be visible in all aspects of the airport operation. | Relationship among safety manager and airport operations | No designated safety manager | I,V | DNM | 0 | 3 | |
| 1.3.1.8 | ACRP 4-05 | I = Worker. Ask worker about organizational structure. | Organizational Structure. SMS spreads responsibility for safe operations throughout all levels. | ACM defines some limited responsibility for safety among key personnel, however it is not clearly defined. Airport staff personnel do understand their immediate organizational structure. | I | UD | 1 | 3 | |
| 1.3.1.9 | AC 150/5200-37 | I =. Worker. Are there clear reporting lines, clearly defined duties and well understood procedures (worker interview). | Personnel fully understand their responsibilities and know what to report, to whom and when. | No written procedures identifying roles and responsibility; not identified on performance report. | I | UD | 1 | 3 | |
| | | | | **Subtotal:** | | | 7 | 27 | |
| | | | | | **Score:** | | *26%* | | |
| **1.3.2 Authority** | | ***Sub-Element 1.3.2 (Authority)** : It is unreasonable to assign responsibility without providing adequate authority to get the job done. For example, people with responsibility for the safety of a piece of machinery needs the authority to shut it down and get it repaired.* | | | | | | | |
| 1.3.2.1 | AC 150/5200-37 | I = Ask personnel with assigned health and safety responsibilities if they have received the authority to perform their assigned duties. This includes committee members, supervisors, etc. | Authority has been provided to responsible parties, so that assigned responsibilities can be met. [PMG (c)(1)(vi)] | During racing events, authority for safety has not been defined in writing for Airport Management, but generally airport safety responsibilities are carried out by the Airport Manager. Designated public safety does have authority to carry out safety related measures in cooperation and under guidance of TSS and NASCAR during race events and emergency events | D,I | UD | 1 | 3 | |
| 1.3.2.2 | AC 150/5200-37 | D = Review Policy or procedures to if this authority has been communicated.<br>I = Ask employees if they are empowered to stop and shut down processes when hazards are identified. | Employees have the authority to stop jobs and shut down equipment if it is considered unsafe and demonstrates this ability. [(PMG (c)(1)(v)] | Yes. Airport staff and stakeholders demonstrated the authority to stop unsafe operations, especially during race week according to personnel interviewed. No written policy available. | D,I | UD | 1 | 3 | |
| 1.3.2.3 | AC 150/5200-37 | I = Ask personnel to explain what personal safety actions they have taken in the last year. | Authority has been clearly implemented. [TED 8.4 Appendix F, 4.2.2 (I) (B) and Appendix E (I) (D) (2)] | Airport management has limited authority and does not have clear guidance on how to implement safety at the airfield as it relates to changes in the facility or the airfield and to the implementation of SMS elements. | D,I | DNM | 0 | 3 | |
| | | | | **Subtotal:** | | | 2 | 9 | |
| | | | | | **Score:** | | *22%* | | |
| | | | | **Total:** | | | 9 | 36 | |
| | | | | | **Score:** | | *25%* | | |
| **1.4. Accountability** | | ***Element 1.4 (Management Accountability)** : Stating expectations of managers, supervisors, and other employees means little if management is not serious enough to track performance, to reward when it is competent, and to correct it when it is not. Holding everyone, especially line-management, accountable for meeting their responsibilities is at the heart of effective workers safety and health protection. If management states high expectations for such protection but pays greater attention to productivity or other values, safety and health protection may be neglected. To be effective, a system of accountability must be applied to everyone, from senior management to hourly employees. If some are held firmly to expected performance and others are not, the system will lose its credibility. Those held to expectations will be resentful; those allowed to neglect expectations may increase their neglect. Consequently, the chance of injury and illness will increase. [TED 8.4 CPTR III, II.C.2.a; Appendix E, Section I.D; Appendix F 4.2.3].* | | | | | | | |
| 1.4.1.1 | AC 150/5200-37 | D: Performance Appraisals referencing "Element for Indicators and Targets" (if Element does not meet, or has gaps, then this criteria also must demonstrate gaps). | There is written guidance regarding accountability for all key personnel. | Performance reviews did not reflect safety. | D | DNM | 0 | 3 | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 1.4.1.2 | AC 150/5200-37 | D: Check Performance Appraisals, Recognitions and Discipline Records. Discipline is not expected to occur predominately after incidents, but be more proactive.<br>I: Ask employees explain the acoountability process. | Management holds workers accountable for safety and health through an effective evaluation process and by checking to make sure they are meeting their responsibilities (performing essential tasks) and correcting or rewarding them as appropriate. | Performance reviews did not reflect safety. Based on the perception onsite, the workforce feels safety is part of the job | D,I | UD | 1 | 3 | |
| 1.4.1.3 | AC 150/5200-37 | D: Performance Appraisal should match up to Element for Responsibilities<br>I = Verify that they are aware of these responsibilities. | Managers and supervisors are asked about and held accountable for carrying out their established safety and health responsibilities. [PMG (c)(1)(vii)] | Performance reviews did not reflect safety. Employees feel that everyone is held accountable for safety. | D, I | UD | 1 | 3 | |
| 1.4.1.4 | ICAO SMM | D: There is evidence that a periodic evaluation system is used by the facility. This can be periodic scorecards, Performance Appraisals, etc.<br>V: The safety performance standards need to match up to Element Indicators and Targets. | Managers are rewarded when safety performance standards are met and vice versa. | Performance reviews did not reflect safety. | D,V | DNM | 0 | 3 | |
| 1.4.1.5 | AC 150/5200-37 | D = There is evidence that key indicators of management's commitment to safety. | Management structure assigned responsibility and accountability, and allocation of appropriate resources must be consistent with the organization's stated safety objectives. | Safety objectives are not defined. There are no key indicators, however, some resources are provided to maintain to FAA standards. | D | UD | 1 | 3 | |
| 1.4.1.6 | AC 150/5200-37 | D = Risk mitigation strategy. | Management official certify acceptance and accountability for risk mitigation strategy. | No evidence found of risk assessments, yet they do try to mitigate FAA identified hazards. | D | UD | 1 | 3 | |
| | | | | **Total:** | | | 4 | 18 | |
| | | | | | **Score:** | | *22%* | | |
| **1.5 Resources** | | *Element 1.5 (Resources): Providing and directing adequate resources (including time, funding, training, personnel, etc.) to those responsible for safety and health, so they are able to carry out their responsibilities. TED 8.4 III.II C.1.a)* | | | | | | | |
| 1.5.1.1 | CSP | D: Budget for Safety Program and its elements. (Adequacy is determined by effectively addressing risks and exposures in priority order.)<br><br>I: verify that the reporting of safety concerns are not limited due to a feeling or perception of resource constraints.<br><br>V: Verify that High Priority Risks are being addressed, mitigated and that critical controls are maintained. | Safety budget is in place and adequate resources in budget are available. | Airport management does not provide an annual or five year written forecasted safety budget. Monies are requested and allocated as needed by the Airport Board. Financial resources are available for the maintenance and property improvement of the airport. Operational costs and airfield maintenance costs are the responsibility of the FBO. There are two elements of the Part 139 that have not been met; recent Class IV requirements for ARFF live-fire training and an approved AEP. | D,I | PM | 2 | 3 | |
| 1.5.1.2 | AC 150/5200-37 | | Adequate resources in people are available. | The airport is staffed up during race events. It was identified that financial resources are not allocated for safety training for race event staff, i.e., staff personnel must, yet are not paid. | I | PM | 2 | 3 | |
| 1.5.1.3 | AC 150/5200-37 | | Adequate resources in equipment are available. | Resources are made available, but observation of equipment demonstrated the need for additional attention, i.e. ARFF truck repairs, tow vehicle for aircraft movement. New fuel trucks and generator recently purchased. | I,V | UD | 1 | 3 | |
| 1.5.1.4 | PMG (c)(1)(vi) | | The resources provided include time to meet expected responsibilities. | Limiting overtime pay for staff, limits some safety responsibilities such as night inspections. Only four night inspections were documented for 2008. | D,I | UD | 1 | 3 | |
| 1.5.1.5 | AC 150/5200-37 | | The resources provided include technical resources such as outside consultants, and experts in the field to meet expected responsibilities. [PMG (c)(1)(vi)] | Neal Schaffer's technical expertise is utilized for airfield improvements. No other outside consultants were identified at this time. | D,I | PM | 2 | 3 | |

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D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 1.5.1.6 | PMG (c)(1)(vi) | | The resources provided includes funding to meet expected responsibilities. | Resources for Aircraft Rescue and Firefighting (ARFF) training have not been provided to meet Part 139 regulatory requirements. Talladega Fire Department has budgeted for at least three persons to receive live fire training in the coming year. The Lincoln Fire Department, the first responders does not have such plans at this time. | D,I | PM | 2 | 3 | |
| 1.5.1.7 | AC 150/5200-37 | | Resources include organizational systems to meet the SMS elements, to include Documentation, Data capture and analysis. | | D,I | DNM | 0 | 3 | |
| 1.5.1.8 | CSP | | Resources are available to prevent exposure to serious uncontrolled hazards. [Appx F ID5 4.2.3] | Resources are allocated to address race event exposures. | I, V | M | 3 | 3 | |
| | | | | **Total:** | | | 10 | 21 | |
| | | | | | **Score:** | | ***48%*** | | |
| **1.6 Documentation** | | *Element 1.6 (Documentation): All critical elements of a basic systems management safety and health management system must be part of the written program. Written documents include procedures and records. [TED 8.4, Chapter III, IIC.1.a.]. The process of formal documentation clarifies the relationship of the SMS to other organizational functions and the integration of SMS activities. Further, the documentation process defines how SMS activities relate to the organization's operating policies. The contents of this documentation may be in the form of safety reporting records, surveys, hazard reporting forms, and risk analysis/mitigation processes. It is important that the organization maintain a record of the measures taken to fulfill the objectives of the SM* | | | | | | |
| 1.6.1.1 | AC 150/5200-37 | D = Documentation of a disciplined approach to documentation and information management. | Management follows a disciplined approach to documentation and information management | Various checklists are used including the pre-event checklist established for the preparation and planning of race events and maintenance checklists. There is no formal management of all required documents such as found in a management system, spreadsheet, scheduling calendar, etc. | D | UD | 1 | 3 | |
| 1.6.1.2 | AC 150/5200-37 | D = Review Safety Objectives<br>I = Leadership | Senior Management support requirements of SMS | Documented safety objectives are not yet required. | D,I | DNM | 0 | 3 | |
| 1.6.1.3 | AC 150/5200-37 | D = Formal Safety Policy and Objectives for implementation | Documentation that clarifies the relationship of the SMS to other organizational functions and the integration of SMS activities | No, formal safety policy or objectives documented. SMS directed, therefore not yet required. | D | DNM | 0 | 3 | |
| 1.6.1.4 | AC 150/5200-37 | D = Documentation process that defines how SMS activities relate to the organization's operating policies. | The contents of this documentation may be in the form of safety reporting records, surveys, hazard reporting forms, and risk analysis/mitigation processes. | No formal hazard identification process defined to address SMS. Limited to Part 139requirements (i.e., inspections, training, etc.) | D | UD | 1 | 3 | |
| 1.6.1.5 | AC 150/5200-37 | D = Review identified hazards. | Hazards to the system (i.e., operation, equipment, people, and procedures) are identified in a systematic or disciplined way. | During speedway events, each agency assigned to provide public safety has established a systematic process of addressing concerns. Hazards identification during routine operation, day-to day business, are documented through various processes; such as facility, equipment and airfield inspections to help identify hazards. | D | UD | 1 | 3 | |
| 1.6.1.6 | AC 150/5200-37 | D = Review SMS documentation that relate to 14 CFR Part 139 responsibilities. | The content may be incorporated into the Airport Certification Manual (ACM) | SMS documentation not established. Draft ACM and AEP incorporates some of the processes. | D | UD | 1 | 3 | |
| | | | | **Total:** | | | 4 | 18 | |
| | | | | | **Score:** | | ***22%*** | | |
| **1.7 Committees** | | *Element 1.7(Committees): Have a defined charter that outlines employee rotation, quorum rules, goals, objectives, etc. and operates to successful committee rules and guidelines. A Committee is active involvement of all participants outside of the meeting. Otherwise, information sharing is just a meeting. If the committee is effectively involved, (but does not demonstrate ownership) maximum score is PM* | | | | | | |
| 1.7.1.1 | ICAO SMM | D = Review committee charter. Rotation is encouraged. | Committee membership allocations are based upon written guidelines. (Charter) | There is no designated or identified safety committee. | I | DNM | 0 | 3 | |
| 1.7.1.2 | ICAO SMM | D = Review meeting minutes | Minutes are documented for each committee and sub-committee meeting. | None | D,I | DNM | 0 | 3 | |

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D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 1.7.1.3 | ICAO SMM | D = Review meeting minutes | Minutes are kept that include members in attendance. | None | D,I | DNM | 0 | 3 | |
| 1.7.1.4 | ICAO SMM | D = Review meeting minutes . Assignments should be tracked month to month until closed. | Minutes are kept that include recommendations made and assignments. | None | D,I | DNM | 0 | 3 | |
| 1.7.1.5 | ICAO SMM | D = Review meeting minutes. | Minutes are published and distributed to upper management and the work force. | None | D,I | DNM | 0 | 3 | |
| 1.7.1.6 | ICAO SMM | I = Ask employees to name some people on the safety committee, how they got there, and what they do. Get specific examples. | Employees know who is on the safety committee and what functions it serves and oversees. | No | I | DNM | 0 | 3 | |
| 1.7.1.7 | ICAO SMM | D: Minutes<br><br>I: Committee Members verify that this is effective and part of their responsibilities as a committee. | Committees are involved in/have ownership of follow-ups of corrective actions identified in Safety Work Orders. | No | D,I | DNM | 0 | 3 | |
| 1.7.1.8 | ICAO SMM | | Committees are involved in/have ownership of the corrective action follow-up of employee concerns. | No | D | DNM | 0 | 3 | |
| 1.7.1.9 | ICAO SMM | | Committees are involved in/have ownership of the inspection process | No | D | DNM | 0 | 3 | |
| 1.7.1.10 | AC 150/5200-37 | | Committees are involved in/have ownership of the Risk Assessment process. | No | D | DNM | 0 | 3 | |
| 1.7.1.11 | ICAO SMM | | Committees are involved in/have ownership of the Objective Setting process. | No | D | DNM | 0 | 3 | |
| 1.7.1.12 | ICAO SMM | | Committees are provided with the time, training, equipment, on-site safety staff technical support and any other resources required in order to perform their functions adequately. | No | D,I | DNM | 0 | 3 | |
| 1.7.1.13 | AC 150/5200-37 | D = Hazard Identification. The safety committee acts as a source of expertise for the Safety Manager. | Airport manager at a small airport could conduct it alone, while it may be conducted by a committee or group at a larger airport. | No, Talladega Speedway provide monthly safety meetings to address hazards associated with the organization. | D | DNM | 0 | 3 | |
| | | | | **Total:** | | | 0 | 39 | |
| | | | | | **Score:** | | *0%* | | |
| **1.0 Policy and Objectives** | | | | Section Total | | | *20%* | | |

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| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| **2.0 Risk Management** | | ***Section 2.0 (****Safety Risk Management): Involves a variety of worksite examinations to identify not only existing hazards, but also conditions and operations in which changes might occur to create hazards. Unawareness of a hazard, which stems from failure to examine the worksite, is a sure sign that safety and health policies and / or practices are ineffective. Effective management actively analyzes the work and worksite, to anticipate and prevent harmful occurrences. [PMG (b)(2)] [TED 8.4 CPTR III, II.C.2.b; Appendix E, Section II.C; Appendix F 4.3.2].* | | | | | | | |
| **2.1 Requirements** | | *Element 2.1 (Requirements): Understanding and acknowledging requirements, to include 14 CFR Part 139, the safety related functions of the ACM, internal and external (insurance company) requirements such that the analysis will not only be inclusive of requirements, but inclusive of the expected controls.* | | | | | | | |
| 2.1.1.1 | OHSAS 18001, 4.3.2.1 | D = Review documentation.<br>V = Formal process, Airport Certification Manual (ACM), describe the system (i.e., operation, equipment, people, and procedures), to identify the hazards. | Airport has implemented and maintained procedures for identifying the ACM and Part 139 requirements that are applicable to it. | ACM has been deevloped to identify hazardous procdeures, operations and conditions. Airport Emeregency Plan (AEP) requirements have not been implemented or approved. | D,V | PM | 2 | 3 | |
| 2.1.1.2 | OHSAS 18001, 4.3.2.2 | D = Review SMS documentation. Does the SMS incorporated Part 139.<br>I = Leadership. Ask | The airport ensures FAA Part 139 responsibilities are incorporated into the ACM. SMS has been taken into account in establishing, implementing and maintaining the airport management systems. | No SMS documentation. However, FAA Part 139 has been incorporated into the Airport Certification Manual (ACM) relating to a Class IV airport. | D,I | UD | 1 | 3 | |
| 2.1.1.3 | VPP 3.1.1.1<br>IIA1 | D = Review dcoumentation.<br>V = Observe the hazards and conditions present in the workplace or airfield. | Compliance with ACM identifies high risk hazards procedures (i.e., fueling operations, airfield electrical work) and determines potential risks. | Part 139 (airfield surveillance, fuel and refueling operation..etc) and facility inspections are conducted daily to identify operational hazards. These inspections are performed by NATC personnel. | D,V | M | 3 | 3 | |
| 2.1.1.4 | OHSAS 18001, 4.3.2.3 | D = Review OSHA training document. (i.e., lockout/tagout, machine guarding, electrical safety) | Regulatory requirements required by OSHA and other agencies have been identified and assigned. | No formal OSHA training courses identified for airport personnel. Monthly meetings the airport manager provides awareness training. | D | UD | 1 | 3 | |
| 2.1.1.5 | OHSAS 18001, 4.3.2.3 | D = Other regulatory documents.<br>I = Safety manager or safety committee members regarding training requirements. | All regulatory requirements are maintained and up-to-date. | Part 139 requires are maintained and up-to-date. | D,I | PM | 2 | 3 | |
| 2.1.1.6 | VPP 3.1 | D = Review Hazard Records. The hazard record is kept for the lifecycle of the system change. | Requirements required by insuerance complany been identified and assigned. | Insurance representative are readily available and onsite during race week. | D | M | 3 | 3 | |
| 2.1.1.7 | OHSAS 18001, 4.3.2.4 | D = Document review<br>I = Interview verification | Relevant information on legal requirements are communicated to persons working under the control of the airport and other relevant interested parties i.e., tenants, contractors). | Discussions with tenants confirm the communication. Non-FAA safety information is not clearly commiunicated. | D,I | PM | 2 | 3 | |
| | | | | **Total:** | | | 14 | 21 | |
| | | | | **Score:** | | | ***67%*** | | |

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D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| **2.2 Hazard Identification** | | *Element 2.2 (Hazard Identification): The first step in Safety Risk Management is to identify hazards that the organization faces in its operational environment. A description of the system or operation that is going to be changed or implemented must be developed as part of this step in order to be able to identify what could go wrong. A hazard is any existing or potential condition that can lead to an accident or incident. In an SMS, all identified hazards are documented and analyzed to determine what action is required to eliminate or reduce the safety risk associated with the hazard.* | | | | | | | |
| 2.2.1.1 | AC 150/5200-37 | D = Review the hazard analysis program for evidence of when it was initiated.<br><br>I: Verify that the assessors used and understood how to identify all hazards.<br><br>V: Observe the workplace to verify that workplace hazards have not been missed. | The Hazard identification process is in writing, and samples are provided. | No, written or formal process. For race weeks there is an informal, yet comprehensive risk analysis that have been done over time to identify potential hazards of this major sport event and controls are in place to address the raceway type of issues. | D | PM | 2 | 3 | |
| 2.2.1.2 | AC 150/5200-37 | | The hazards associated with Equipment, Tools and Materials are considered. | No formal system in place to show hazards that results from equipment. | D,V | DNM | 0 | 3 | |
| 2.2.1.3 | AC 150/5200-37 | | The hazards associated with Operational procedures are considered. | No written procedures found for race event, however, interviews with public safety representative stated that operational hazards are addressed during the planning, implementation, and execution of the events. | D | UD | 1 | 3 | |
| 2.2.1.4 | AC 150/5200-37 | | The hazards associated with Incident History are considered. | There is no records or documentation provided to demonstrate lessons learned or action plans for addressing incidents. | D,V | DNM | 0 | 3 | |
| 2.2.1.5 | AC 150/5200-37 | | Hazards associated with the Human Element are considered. | No behavioral observations were indicated. | D,I | DNM | 0 | 3 | |
| 2.2.1.6 | AC 150/5200-37 | | Hazards associated with the Environment are considered. | During race week, EMA and Lincoln Hazmat teams are available and address environmental issues. ADEM provide periodic inspections of the airport throughout the year to identify environmental concerns. | D | M | 3 | 3 | |
| 2.2.1.7 | AC 150/5200-37 | | Hazards associated with External services (e.g., FBO or law enforcement, etc.) are considered. | Speedway race week, associate agencies (i.e. fire dept, law enforcement, security) review operations for hazardous conditions and consideration. | D,I | UD | 1 | 3 | |
| 2.2.1.8 | PMG (c)(2) | | Working conditions & operations are analyzed to identify hazards not previously recognized by the industry. | No formal documented analysis accomplished. Informal assessment are performed. | D | UD | 1 | 3 | |
| | | | | **Total:** | | | 8 | 24 | |
| | | | | **Score:** | | | *33%* | | |
| **2.3 Hazard Analysis** | | *Element 2.3 (Hazard Analysis): Procedures exist to ensure the review of processes and the identification and control of related hazards. Acceptable techniques include, but are not limited to Job Hazard Analysis and Process Hazard Analysis. [TED 8.4 CPTR III, II.C.2.b]. The objective of the system description is to determine a baseline hazard analysis for the baseline system. A formal process of the management of change, the system description and the baseline hazard analysis should be reviewed periodically, even if circumstances of change are not present, to determine their continued validity.* | | | | | | | |
| 2.3.1.1 | AC 150/5200-37 | D = Review process instructions, training and program procedures. | The Hazard Analysis process follows a prescribed process, such as Job Hazard or Safety Analysis, Failure Modes and Effects Analysis, HAZ-Ops, fault trends, etc. and are documented. | No formal process | D | DNM | 0 | 3 | |
| 2.3.1.2 | AC 150/5200-37 | I: Verify that they are knowledgeable and received training | Personnel performing worksite analysis should have a degree of experience and competence. | Race week provides experienced personnel to perform informal analysis process. | I | UD | 1 | 3 | |

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| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 2.3.1.3 | AC 150/5200-37 | D = Priorities typically include incidence, high-hazards, regulations, risk, judgment and change.<br>V = Verify through observation that higher risks are on the schedule. | Analysis is scheduled based on a priority system. | No formal process found. | D,V | DNM | 0 | 3 | |
| 2.3.1.4 | AC 150/5200-37 | | Hazard analysis is performed for higher risk jobs, tasks and processes.[PMG (c)(2)(C)] | No formal process found. | D | DNM | 0 | 3 | |
| 2.3.1.5 | ICAO SMM | D = Review hazard analysis information looking for analysis quality, control process.<br>I = Ask safety director to explain the process of reviewing hazard analysis performed by others. | Staff personnel who specialize in risk assessment review the results of worksite analyses. | No, airport staff do not conduct risk assessment review. Undocumented worksite analysis is accomplished by agency specific personnel. | D,I | UD | 1 | 3 | |
| | | | | **Total:** | | | 2 | 15 | |
| | | | | **Score:** | | | *13%* | | |
| **2.4 Risk Assessment** | | *Element 2.4 (Risk Assessment): Risk assessment system involves an analysis of a job, process or the interaction of activities in order to identify hazards that have been or could be "built in", this analysis could include JHA, failure modes and effects, analysis, ergonomic assessments, etc. The analysis must result in improved work practices and employee training as well as (particularly with process analysis) preventive engineering controls where hazards are discovered. Typically, the complexity of abatement technology, the degree of risk, and the availability of necessary equipment, materials and qualified staff affect hazard controls. In VPP-level site, managers involve employees in discussions of methods to identify useful prevention and control measures, serve as a means for communicating the rational of decisions, and encourage employee acceptance of decisions. Hazard controls are incorporated in the following order to alleviate potential hazards (1) material substitution, (2) engineering controls, (3) administrative controls, (4) personal protective equipment, and (5) work rules as a part of the site safety and health program. A VPP-level site will use engineering and administrative controls where possible to control and reduce exposures, before considering the need for of PPE. [TED 8.4, CPTR III, II.C.3.b; Appendix E, Section III.A.; Appendix F 4.4.1]* | | | | | | |
| **2.4.1 Risk Assessment Inputs** | | *Sub-Element 2.4.1 (Inputs):* | | | | | | | |
| 2.4.1.1 | AC 150/5200-37 | V = Verify the assessment of the system or component compare to the achieved risk level with the tolerable risk level. | A qualified (industry recognized) risk assessment process is used. | No written risk assessment procedures exists to identify high hazard task or activities. | V | DNM | 0 | 3 | |
| 2.4.1.2 | AC 150/5200-37 | D = Persons or group require sufficient operations expertise, safety experience, and training to conduct the assessment. | Risk Assessors are trained in this process. | Airport personnel are not trained to perform Job Hazard Analysis (JHA) or Job Safety Analysis (JSA). Personnel are qualified and trained to conduct assessments of their designated locations or area of expertise. | D | UD | 1 | 3 | |
| 2.4.1.3 | AC 150/5200-37 | D = Review incident reports (a risk factor). In order to assess the risk of an accident or incident occurring, severity and likelihood are first determined. | Risk determination is in part based on incident history (a risk factor) | Talladega Airport has a low incident rate due to the amount of personnel, exposure and activities performed annually. The reported aircraft incidents that occurred provided lessons learned and action items to help minimize recurrence. There is no system established to prioritize task or activities. | D | PM | 2 | 3 | |
| 2.4.1.4 | AC 150/5200-37 | V = Each hazard in its system context is identified to determine what risks exist, if any, that may be related to the hazard. | Risk determination is in part based on regulatory requirements. (a risk factor) | No process found | V | DNM | 0 | 3 | |
| 2.4.1.5 | AC 150/5200-37 | V = Any existing or potential condition that can lead to injury, illness, or death to people; damage to or loss of a system, equipment, or property; or damage to the environment. | Risk determination is in part based on property damage criteria. (risk factor) | No process in place to show action items or means of controls (hierarchy) | V | DNM | 0 | 3 | |
| 2.4.1.6 | AC 150/5200-37 | D = Review assessment documents. Depending on the nature and size of the system under consideration operating environment, e.g., cold, night, low visibility (a risk factor) | Risk determination is in part based on environmental impact criteria. (a risk factor) | Part 139 requirements help ensure airfield operational hazards are prioritized by impact of identified deficiencies and/or discrepancies noted during airfield inspection. | D | PM | 2 | 3 | |
| 2.4.1.7 | ACRP 4-05 | D = Review documented inventory of airport operations and activities | An inventory of activities and tasks is created, and is a basis for risk characterization. | No documented inventory | D | DNM | 0 | 3 | |

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| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 2.4.1.8 | ACRP 4-05 | D = Review documented list of potential hazard | A list of potential hazards is determined and documented to assist in the risk determination process. | No documented list | D | DNM | 0 | 3 | |
| 2.4.1.9 | AC 150/5200-37 | D = Review safety risk controls to ensure mitigation of an unacceptable risk for measurable and monitored effectiveness. | A list of potential controls is determined and documented to assist in the risk determination process. | No | D | DNM | 0 | 3 | |
| 2.4.1.10 | AC 150/5200-37 | D = Review document for Hierarchy of controls used in controlling risk. | The list of potential controls are organized based on hierarchy, to include elimination, substitution, engineering, administrative and personal protective equipment | No | D | DNM | 0 | 3 | |
| 2.4.1.11 | AC 150/5200-37 | V = Verify how risk are determined to be unacceptable, identify and evaluate risk mitigation measures by which the probability of occurrence and/or the severity of the hazard could be reduced. | A risk matrix is used to determine "acceptable", "unacceptable" and "remediation option" risks (tolerability) | No | V | DNM | 0 | 3 | |
| 2.4.1.12 | AC 150/5200-37 | D = Review established requirements. Determination of severity is independent of likelihood, and likelihood should not be considered when determining severity. | Risk Factors, Severity and likelihood, are defined. | No | D | DNM | 0 | 3 | |
| | | | | | | | | | |
| | | | | ***Subtotal*** | | | 5 | 36 | |
| | | | | **Score:** | | | ***14%*** | | |
| **2.4.2 Risk Assessment Process** | | *Sub-Element 2.4.2 (Process):* | | | | | | | |
| 2.4.2.1 | AC 150/5200-37 | D = Formal risk assessment program that identifies and documents hazards on the airport. | A written risk assessment procedure exists, encompassing all of these criteria (inputs, process steps and outputs). | No Formal risk assessment program | D | DNM | 0 | 3 | |
| 2.4.2.2 | ICAO SMM | D = Review Prioritized listing | Tasks and activities are prioritized by assessment by risk factors. | No formal prioritized listing for hazard abatement. | D | DNM | 0 | 3 | |
| 2.4.2.3 | ICAO SMM | D = Review hazard listing | Hazards are identified for prioritized tasks and activities. | No hazard listing | D | DNM | 0 | 3 | |
| 2.4.2.4 | ICAO SMM | I = Management. Prioritized Task and Activities | Risk is determined for prioritized tasks and activities. | Speedway events stakeholder participants collectively discuss risk factors associated with related operations. | I | PM | 2 | 3 | |
| 2.4.2.5 | ICAO SMM | D = Review documents for hierarchy of controls | Controls are selected based on the hierarchy of controls. | No documents found or presented reflecting controls | D, I | DNM | 0 | 3 | |
| 2.4.2.6 | ICAO SMM | D = Review procedures for identifying high risk and effective controls | Higher risk (unacceptable) use more effective controls (elimination, substitution and engineering). | No written procedures for controls | D, I | DNM | 0 | 3 | |
| 2.4.2.7 | AC 150/5200-37 | D = Review Lessons learned, safety news letters, notices and bulletins, bulletin boards, Etc.<br>I = Ask staff and employees are they actively encouraged to identify potential hazards and propose solutions.<br>V = Safety reporting drop boxes and electronic reporting through web sites or email | Hazard and controls are initially and routinely communicated to the workforce. | Safety meetings provide opportunity for airport staff and Talladega speedway employees to exchange information and data relating hazards associated with events. There is no safety reporting drops available; however, personnel can contact the Talladega Speedy "hotline" regarding safety concerns. | D,I,V | UD | 1 | 3 | |

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| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| 2.4.2.8 | AC 150/5200-37 | D = Review self-inspections and external reports. Safety Assurance includes self-auditing, external auditing, and safety oversight. | The use of controls, identified for initial high risks, are verified as being in place and used via a verification/inspection process. | Self-inspections are performed monthly throughout the year and increased during the major speedway events. External audits of the speedway are conducted by the Headquarters Office in Daytona (no external report available). | D | PM | 2 | 3 | |
| 2.4.2.9 | AC 150/5200-37 | D = Review Goals and Objectives for risk reduction. | Risk reduction is ongoing, and as a by product of Goals and Objectives. | No formal process to show risk reduction of hazards associated with race week. | D | DNM | 0 | 3 | |
| 2.4.2.10 | AC 150/5200-37 | D = Review annual safety reports. Self-audits and external auditing practices. | The Risk Assessment Process (input, process and output) is evaluated annually as part of the SMS assessment. | Uncertain, if external audits are conducted by the Headquarters Office in Daytona (no external report available). | D | UD | 1 | 3 | |
| 2.4.2.11 | AC 150/5200-37 | D = Review records. Hazards are assessed, mitigated, documented, tracked, and operational data are continuously monitored to provide feedback on hazards. | Records of inputs, data and outputs are maintained | No records. | D | DNM | 0 | 3 | |
| | | | | ***Subtotal*** | | | 6 | 33 | |
| | | | | | **Score:** | | ***18%*** | | |
| **2.4.3 Risk Assessment Outputs** | | *Sub-Element 2.4.3 (Outputs):* | | | | | | | |
| 2.4.3.1 | ICAO SMM | D = Review documentation | A high hazard task and activity list is documented and maintained. | No formal documentation or system maintained | D | DNM | 0 | 3 | |
| 2.4.3.2 | ICAO SMM | I = Workers Involvement | There is worker involvement in the risk assessment process. | No formal risk assessment, personnel perform daily inspections and surveillance | I | UD | 1 | 3 | |
| 2.4.3.3 | AC 150/5200-37 | D = Review risk assessment documentation. The identified risk would be documented before moving to assess and analyze the risk, a determination of the probability of that risk occurring, and the severity if such an event were to occur. | Risk and tolerability limits are established and documented for tasks and activities. | No documentation found | D | DNM | 0 | 3 | |
| 2.4.3.4 | AC 150/5200-37 | D = Hazard and identified risk are documented before moving to assess and analyze the risk, a determination of the probability of that risk occurring, and the severity if such an event were to occur. | Controls and work procedures from the risk assessment are integrated into operational procedures. | No document or records | D | DNM | 0 | 3 | |
| 2.4.3.5 | AC 150/5200-37 | D = Review risk assessment documents. All potential hazards are identified and documented and are subjected to an assessment of the possible severity and potential risk. | Action items identified during the risk assessment process are documented, tracked and closed on a timely basis. | No risk assessment documents to identify action items/plan implemented. | D | DNM | 0 | 3 | |
| 2.4.3.6 | ICAO SMM | D = Review risk assessment documentation, determine if a reasonable percentage of controls are based on these more effective methods.<br>V = Observe the worksite and identify areas where engineering design principles integrate hazards and those areas yet to be addressed. | Substitution, Defense in Depth and Engineering techniques are used preferably to control or correct hazards where feasible and appropriate, especially for more serious hazards. [PMG(c)(3)(i)(A)] | No formal process established, possibly due to the amount of incident. There is no centralized collection system (database) to review actions taken. | D,V | DNM | 0 | 3 | |
| 2.4.3.7 | AC 150/5200-37 | D = Review safety self-audits and external auditing practices. | The Risk Assessment annual process evaluation results in a documented improvement strategy. | Periodic self-audits and external audits performed on the speedway. Part 139 requirements are evaluated and performed by FBOs and FAA. | D | PM | 2 | 3 | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| ***Subtotal*** | | | | | | | 3 | 21 | |
| | | | | | **Score:** | | ***14%*** | | |
| **Total:** | | | | | | | 14 | 90 | |
| | | | | | **Score:** | | ***16%*** | | |
| **2.5 Risk Management** | | *Element 2.5 (Risk Management): Safety risk management encompasses the assessment and mitigation of the safety risks of the consequences of hazards that threaten the capabilities of an organization, to a level as low as reasonably practicable (ALARP). The objective of safety risk management is to provide the foundations for a balanced allocation of resources between all assessed safety risks and those safety risks the control and mitigation of which is viable. Safety risk management builds upon a system design into which appropriate controls to the safety risks of the consequences of anticipated hazards are embedded in the system.* | | | | | | | |
| **2.5.1 Mitigate** | | *Sub-Element 2.5.1 (Mitigation): Implementation and Communication of Controls and Work Procedures. Risk mitigation strategies are based on human performance; it is the least reliable sort of solution to depend upon. The ultimate purpose of hazard identification, risk determination, and analysis is to prepare for risk mitigation. Risk mitigation measures work through reducing the probability of occurrence, severity of the consequences, or both. Risk mitigation approach selections include avoidance, transfer, assumption, or control measures.* | | | | | | | |
| 2.5.1.1 | ICAO SMM | D = Review hazard analysis procedures and safe job procedures. Have the results of the analysis made it into the safe job procedure.<br>I = Ask employees to describe the hazard analysis process for recent changes or initiatives. (worker interview )<br>V = Are job hazard analysis posted in the workplace? | Routine hazard review such as process review or hazard analysis or (in construction) phase hazard analysis results in improved safe work procedures and controls. | No formal hazard analysis/safe job procedures established. Speedway race week pre-checklist, communication/, and close coordination between the agencies (stakeholders) help improve the safe work procedures. Personnel are informed during event orientation of changes in conditions and hazards associated with the workplace. | D,I,V | UD | 1 | 3 | |
| 2.5.1.2 | ICAO SMM | D = Review process instructions and program procedures. | Risk Analysis results are documented. | No instructions available. | D | DNM | 0 | 3 | |
| 2.5.1.3 | ICAO SMM | D = Review Analysis<br>V= sample at least a few tasks and analysis records. | Analysis documents task steps, hazards and controls, recommendations made, dates conducted, and responsible parties. | Documents/records unavailable to reflect analysis process | D,V | DNM | 0 | 3 | |
| 2.5.1.4 | AC 150/5200-37 | D = Review training documentation.<br>I = Ask employees if they have received training on PPE use. (worker interview ) | Employees have received training on why controls (including PPE) are necessary and how to use and maintain it. | PPE training provided through National Air Transportation Association's (NATA) Safety 1st and safety meetings. During observation and informal interview noted that not all personnel had PPE available when performing hazardous operations (i.e., fire retarded gloves, aprons. etc). Equipment and training is provided. | D,I | PM | 2 | 3 | |
| 2.5.1.5 | AC 150/5200-37 | D = Review training records.<br>I = Workers - verify. | The controls identified are used to train operators to safe job procedures. | Reviewed airport staff training records and Speedway monthly safety training meeting. Talladega speedway provides training during monthly meetings (i.e. PPE, electrical safety, ..etc). Other in-depth specialized training such as forklift driving, lockout/tagout, confined spaces are performed in a different forum. | D, I | PM | 2 | 3 | |
| 2.5.1.6 | ACRP 4-05 | D = Review PPE program, JHAs, written procedures, inspections, etc. for inclusion of PPE. | Controls are understood and followed by all affected parties.[PMG(c)(3)(C)] | No JHAs or written procedures. Process are in-place and incorporated during speedway races. Fire department, EMA, Security personnel and Airfield operators have appropriate PPE available on-site during race week. Volunteers are provide reflective vests, hearing protection, gloves, as required per assigned operation. | D | PM | 2 | 3 | |
| 2.5.1.7 | ICAO SMM | D = Review operating instructions. Determine if they reflect safe work practices identified in hazard analysis. | Safe operating procedures have been incorporated into operating instructions. | No Operating Instructions (OI) or Standard Operating Procedures (SOP). Public safety agencies have specific procedures. Airport does not maintain OI or SOPs. | D | DNM | 0 | 3 | |

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D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 2.5.1.8 | ICAO SMM | D = Review maintenance instructions. Determine if they reflect safe work practices identified in hazard analysis. | Safe operating procedures have been incorporated into maintenance instructions. | No maintenance instructions beyond equipment or vehicle manufactures instructions. | D | UD | 1 | 3 | |
| 2.5.1.9 | ICAO SMM | D = Review safe job procedures. Determine if they reflect non-routine tasks performed at the facility.<br>I = Ask employee responsible for performing non-routine tasks if they are aware of the hazards associated with the tasks. | Workers involved in non-routine operations, or who are rarely assigned, are aware of job hazards and safety precautions. | No official safe job procedures. Speedway race participants are provided awareness training and briefed on hazard associated with job or task. Contractor safety plans are not filed at the airport. | D,I | UD | 1 | 3 | |
| ***Subtotal*** | | | | | | | 9 | 27 | |
| | | | | | **Score:** | | *33%* | | |
| **2.5.2 Monitoring/Supervision** | | *Sub-Element 2.5.2 (Monitoring and Supervision): The establishment and maintenance of a safety database provide an essential tool for corporate managers, safety managers and regulatory authorities monitoring system safety issues.* | | | | | | | |
| 2.5.2.1 | ICAO SMM | D = See Doc.<br>I = Ask supervisors to explain how rules are enforced. (supervisor interview ) | Safety and health rules are enforced by line management. | Violations are corrected on the spot during race events. Supervisors are actively involved during speedway races. | I | PM | 2 | 3 | |
| 2.5.2.2 | ACRP 4-05 | I = Ask workers if they know of workplace rules and can give examples. (worker interview ) Positive reinforcement cannot be based on absence of accidents. | Procedures for safe work are understood and followed by all affected parties as a result of an effective positive reinforcement process. [PMG(c)(3)(B)] | Positive reinforcement is provided verbally to individuals and luncheons for organizational accomplishment. No formal process exist. | I | UD | 1 | 3 | |
| 2.5.2.3 | ICAO SMM | D = Review disciplines. Apply to both management and employees. | Procedures for safe work are understood and followed by all affected parties through a clearly communicated and implemented disciplinary system. | No evidence of safety discipline actions been accomplished at the airport. During speedway races disciplinary actions is communicated to participants (temporary employees). | D | PM | 2 | 3 | |
| 2.5.2.4 | ACRP 4-05 | D = Review most of the discipline reports. Compare to the OSHA log. | The majority of disciplines are based on observations rather than management waiting for accidents to occur. [PMG(c)(3)(B)] | No evidence of safety observations performed relating to disciplinary actions. | D | DNM | 0 | 3 | |
| 2.5.2.5 | ICAO SMM | D = Review most of the discipline reports. | The discipline systems is enforced for both management and employees. | No evidence of safety discipline actions. | D | DNM | 0 | 3 | |
| 2.5.2.6 | ICAO SMM | D = Review conformance reports<br>V = Verify measures are posted or distributed | Control verification conformance is measured and reported to the workforce. | No conformance reports distributed or available. | D, V | DNM | 0 | 3 | |
| 2.5.2.7 | ICAO SMM | D = Review performance appraisals process for conformance. | Management and departments are measured on control conformance, risk reduction strategies, and timely closure of action items. These measurements are part of the performance appraisal process and results in improved performance. | Performance appraisals of airport staff personnel do not address or identify safety requirements, such as roles and responsibilities, safety goals, or measures of safety conformance. | D | DNM | 0 | 3 | |
| | | | | | | | 5 | 21 | |
| | | | | | **Score:** | | *24%* | | |
| **2.5.3 Change Hazard Analysis** | | ***Sub-Element 2.5.3 (Change Hazard Analysis): Procedures to ensure analysis of all newly acquired or altered facilities, processes, materials, equipment, and/or phases before use begins, to identify hazards and the means for their prevention or control. Typically, a process includes requirements, review criteria checklists, health and safety signature authority, etc.*** | | | | | | | |

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D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 2.5.3.1 | PMG(c)(2)(B) | D = Pre-use or change analysis written program or procedure. | There is a written procedure for the Pre-Use process. This procedure includes responsibilities and a description of what the reviewer is suppose to review. | No written process for pre-use analysis | D, I | DNM | 0 | 3 | |
| 2.5.3.2 | PMG(c)(2)(B) | D = Check Pre-use and incident records.<br>I = Verify that hazard analysis are updated by responsible parties, typically for each incident investigation or process change, integrated with Pre-use. | Analysis is re-visited whenever changes or errors are identified. | No, reviewed three incident reports (minor), documentation or evidence of an existing process. | D | DNM | 0 | 3 | |
| 2.5.3.3 | PMG(c)(2)(B) | D= Required by the written program, and evidenced by engineering design review records. | The Pre-Use Analysis is integrated into the sites' engineering design review process. | No written program established | D | UD | 1 | 3 | |
| 2.5.3.4 | PMG(c)(2)(B) | D = Review procedures for performing pre-use analysis on new facilities.<br>I = Ask process owners to explain the process with examples. | There is a process to analyze modifications to existing and new facilities. | No documentation. Race coordinators (stakeholders) and Talladega speedway perform analysis of existing facilities prior to the events (interview). The airport conducted an informal analysis on the new GA hangars. | D,I | UD | 1 | 3 | |
| 2.5.3.5 | PMG(c)(2)(B) | D = Review procedures for performing pre-use analysis on new equipment.<br>I = Ask process owners to explain the process with examples. | There is a process to analyze modifications to existing and new equipment. | No | D,I | DNM | 0 | 3 | |
| 2.5.3.6 | PMG(c)(2)(B) | D = Review procedures for performing pre-use analysis on new materials.<br>I = Ask process owners to explain the process with examples. | There is a process to analyze modifications to existing and new materials and chemicals. | No | D,I | DNM | 0 | 3 | |
| 2.5.3.7 | PMG(c)(2)(B) | D=Review the latest changes for documented evidence of process, checklist and recommendations tracked to closure.<br>I = Ask process owners to explain the process with examples.<br>V = Verify that appropriate hazards have been identified and controlled. | This Pre-use analysis process exists at design stage, prior to purchase. | No | D,I | DNM | 0 | 3 | |
| 2.5.3.8 | PMG(c)(2)(B) | | The Pre-use analysis process effectively identifies and assures that all safety controls are in place prior to production/use. | Race events stakeholder participants collectively discuss risk factors associated with related operations. Rules seem to be effective and clearly understood by all participants. | D,V | UD | 1 | 3 | |
| | | | | *Subtotal* | | | 3 | 21 | |
| | | | | | **Score:** | | ***14%*** | | |
| **2.5.4 Risk Reduction** | | ***Sub-Element 2.5.4 (Risk Reduction): Trend analyses in the safety assurance process should be employed to track safety performance measures over time and to factor this information into planning of future activities under situations of change. Moreover, where deficiencies have been found and corrected as a result of past audits, evaluations, investigations, or reports, it is essential that such information is considered to assure the effectiveness of corrective actions. Experience has shown that air safety-related incidents are best recorded and tracked using a PC-based database. However, a spreadsheet format, Gantt chart or MS Project type layout is recommended for ease of viewing and tracking. Each item will be assessed to determine how the organization will create or modify policies, objectives, procedures or processes to incorporate the required SMS components and elements.*** | | | | | | | |
| 2.5.4.1 | ICAO SMM | D = See Doc.<br>I = Ask supervisors to explain how rules are enforced. (supervisor interview ) | Safety and health rules are enforced by line management. | No written formalized process, yet personnel are aware of hazards | D, I | UD | 1 | 3 | |

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D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 2.5.4.2 | ICAO SMM | I = Ask workers if they know of workplace rules and can give examples. (worker interview ) Positive reinforcement cannot be based on absence of accidents. | Procedures for safe work are understood and followed by all affected parties as a result of an effective positive reinforcement process. | No written formalized process, personnel provide examples relating to race events. | I | UD | 1 | 3 | |
| 2.5.4.3 | ICAO SMM | D = Review disciplines. Apply to both management and employees. | Procedures for safe work are understood and followed by all affected parties through a clearly communicated and implemented disciplinary system. | Discipline process not apparent. Speedway race event are communicated, yet not documented. | D | DNM | 0 | 3 | |
| 2.5.4.4 | ACRP 4-05 | D = Review most of the discipline reports. Compare to the OSHA log. | The majority of disciplines are based on observations rather than management waiting for accidents to occur. [PMG(c)(3)(B)] | Discipline process not apparent. OSHA logs did not provide data. | D | DNM | 0 | 3 | |
| 2.5.4.5 | ICAO SMM | D = Review most of the discipline reports. | The discipline systems is enforced for both management and employees. | Discipline process not apparent. Speedway race event are communicated, yet not documented. | D | DNM | 0 | 3 | |
| ***Subtotal*** | | | | | | | 2 | 15 | |
| | | | | | **Score:** | | ***13%*** | | |
| | | | | | **Total:** | | 10 | 60 | |
| | | | | | **Score:** | | ***17%*** | | |
| **2.6 Investigations** | | *Element 2.6 (Investigation): All types of significant incidents (incursions, property damamge, injuries, illness, spills, fires, first aid, near-misses) are investigated. Accidents and incidents in which employees narrowly escape injury, clearly expose hazards. Analysis to identify their causes permits development of measures to prevent future injury or illness. Although a first look may suggest that "employee error" is a major factor, it is rarely sufficient to stop there. Even when an employee has disobeyed a required work practice, it is critical to ask, "Why"? A thorough analysis will generally reveal a number of deeper factors, which permitted or even encouraged an employee's action. Such factors may include a supervisor's allowing or pressuring the employee to take short cuts in the interest of production, inadequate equipment, or a work practice that is difficult for the employee to carry out safely. An effective analysis will identify actions to address the causal factors in an accident or "near miss" incident. [TED 8.4, CPTR III, II.C.2.i; Appendix E, Section II.G.; Appendix F 4.3.5]* | | | | | | | | |
| 2.6.1.1 | ICAO SMM | D = Review written procedures. They typically include responsibilities, instructions, definitions and recordkeeping requirements. | Accident/Investigation procedures are in writing. | Not in writing for the airport | D | DNM | 0 | 3 | |
| 2.6.1.2 | ICAO SMM | D = Review investigation reports. | Accident investigations are documented. | Airport uses Talladega Super speedway and ISC Incident Report forms. | D | UD | 1 | 3 | |
| 2.6.1.3 | ICAO SMM | D = Training records and course outline.<br>I = Investigators | All investigations are conducted by personnel trained in investigation and causal factor techniques. | During race event, accidents are investigated and some documented. Airfield accidents are investigated by NTSB, FAA and ISC. For day to day incidents causal factors are not always identified. Note: Designated airport staff personnel require formal investigation training. | D, I | UD | 1 | 3 | |
| 2.6.1.4 | ICAO SMM | I = Validates<br>V = Verify a few yourself. | Personnel independent of the injured party should validate that corrective actions are appropriately identified. | Corrective actions are not always identified | I, V | DNM | 0 | 3 | |
| 2.6.1.5 | ICAO SMM | D = Review investigation reports. | All accident investigations include prevention recommendations. | Corrective actions are not always identified so preventive measures are not documented | D | DNM | 0 | 3 | |

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D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 2.6.1.6 | ACRP 4-05 | D = Review investigation reports and compare with OSHA log. Determine if lost time accidents are captured.<br>I = Discuss with responsible parties methods of capturing lost time incidents for investigation. | In depth incident investigations are conducted for all serious and lost time accidents. [PMG(c)(3)(B)] | If aircraft related, it is done by others such as NTSB. ISC investigator and adjusters are on site during race week. Airport is considering having full time investigator on site at future race events for the airport operations. | D,I | PM | 2 | 3 | |
| 2.6.1.7 | ICAO SMM | D = Review investigation reports and compare with first aid logs and near miss. Determine if accidents and near misses are captured.<br>I = Discuss with responsible parties methods of capturing property loss investigations. | All significant incidents including recordable, injuries, illnesses, property damage, fires, spills etc. resulting in personal injury or property damage are investigated. [PMG (c)(2)(iv)] | If aircraft related, it is done by others such as NTSB. ISC investigator and adjusters are on site during race week. Airport is considering having full time investigator on site at future race events for the airport operations. | D,I | PM | 2 | 3 | |
| 2.6.1.8 | ICAO SMM | D = Review caused factor methodology to verify it follows a defined causal analysis or root cause analysis technique<br>V = Observe investigation techniques to verify if causal factor methods conform to requirements and identify root causes. | All investigations address the causal factors and root cause rather than simply blame on the employee (i.e., stopping at "human error" ). This results in actions to prevent future occurrences. | Not addressed | D,V | DNM | 0 | 3 | |
| 2.6.1.9 | ICAO SMM | D = Review committee meeting minutes.<br>I = Ask committee members their role in accident investigations. | (For construction only) The joint labor management committee is involved in accident investigations. | Not applicable | D,I | N/A | | 0 | |
| 2.6.1.10 | ICAO SMM | D = Review accident investigation documentation. | Contractors report accidents, property damage, near misses. | No | D | DNM | 0 | 3 | |
| 2.6.1.11 | ICAO SMM | V = Verify that recent Corrective Action Plans are closed. | Contractor corrective action plans are recorded and tracked and implemented. | No, not verified or tracked | V | DNM | 0 | 3 | |
| **Total:** | | | | | | | 6 | 30 | |
| | | | | | **Score:** | | *20%* | | |
| **2.0 Risk Management** | | | | Section Total | | | *20%* | | |
| **3.0 Safety Assurance** | | *Section 3.0 (Safety Assurance): Safety Assurance is triggered by a determination that a hazard or potential hazard exits. Where feasible, hazards are prevented by effective design of the jobsite or job. Where it is not feasible to eliminate hazards, they are controlled to prevent unsafe and unhealthful exposure. Elimination or controls is accomplished in a timely manner, once a hazard or potential hazard is recognized. The ideal order implementing controls systems is through substitution, engineering, administrative and lastly personal protective equipment.* | | | | | | | |
| **3.1 Inspections and Self-Auditing** | | *Element 3.1 (Inspections/Audits): A comprehensive examination of the workplace has been conducted and hazard controls have been established, routine site safety and health inspections are necessary to ensure that changes in conditions and activities do not create new hazards, that hazard controls remain in place and are effective. Personnel performing regular inspections should, however, possess a degree of experience and competence adequate to recognize hazards in the areas they review and to identify reasonable means for their correction or control. Such competence should normally be expected of ordinary employees who are capable of safely supervising or performing the operations of the specific workplace. Additional regulatory inspections may include: emergency response equipment, PPE, forklift, cranes, hoists, slings, ladders, fire extinguishers, sprinkler systems, elevators, boilers, pressure vessels, etc. Inspection procedures must be written and include frequency, those responsible for conducting the inspections, recording of findings, responsibility for abatement and tracking of hazards for timely correction. [TED 8.4, Chapter III, IIC.2.f.].* | | | | | | | |
| 3.1.1.1 | AC 150/5200-37 | D = Written procedures typically identify: responsibility, frequency, topic areas, and recordkeeping. | Written procedures exist for conducting routine self-inspections with written reports and hazard corrective tracking. | Daily ACM inspections are completed and documented. TSS performs facility inspections by manual tracking methods. | D | PM | 2 | 3 | |

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D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 3.1.1.2 | AC 150/5200-37 | D = Written procedures typically identify: responsibility, frequency, topic areas, and recordkeeping. | There is a written schedule of inspections. | Yes, per ACM fuel farm, refuelers. Independent inspections are done by FAA, Chevron and ADEM. | D | M | 3 | 3 | |
| 3.1.1.3 | AC 150/5200-37 | D = Written procedures typically identify: responsibility, frequency, topic areas, and recordkeeping. | Written procedures define inspections & corrective action as to responsibility. | Per ACM procedures are defined | D | M | 3 | 3 | |
| 3.1.1.4 | AC 150/5200-37 | D = Written procedures typically identify: responsibility, frequency, topic areas, and recordkeeping. | Written procedures define corrective action as to frequency. | Per ACM procedures are defined | D | M | 3 | 3 | |
| 3.1.1.5 | ICAO SMM | D = Review the checklist and hazard inventory to verify that they are based on common elements.<br>V = Observe areas that have checklists to verify that all hazards have been addressed. | Written inspection checklists are used to provide guidance as to where to look and what to look for | Yes. Daily inspections, pre race checklist, fueling activities and facility inspections | D,V | M | 3 | 3 | |
| 3.1.1.6 | ICAO SMM | D= Review Inspection checklists. | References incorporates information sources such as job hazard analysis, investigations, employee concerns, etc. | No tailored to equipment and facilities | D | DNM | 0 | 3 | |
| 3.1.1.7 | ICAO SMM | D= Review Inspection checklists. | Checklist criteria check for controls from hazards discovered through regulatory review, investigations, hazard analysis. Checklists are periodically updated to reflect changes. | No based primarily on regulatory requirements. Race checklists are based on prior experience | D | DNM | 0 | 3 | |
| 3.1.1.8 | ICAO SMM | D = Review written procedures. | Written procedures define how to record findings. | ACM procedures on how to inspect the airfield | D | PM | 2 | 3 | |
| 3.1.1.9 | ICAO SMM | D = Typically , even hazards fixed on the spot are recorded. They may not need to be tracked, however. | Written procedures define which findings are reported. | Yes on daily self-inspections and fueling | D | PM | 2 | 3 | |
| 3.1.1.10 | PMG (c)(2)(C)(ii) | D = Review inspections such as general workplace, chemical use, emergency preparedness, fire protection, and high hazard areas to determine hazards found.<br>V = Observes hazards in the workplace that were not identified on previous inspections. | Regular site safety and health inspections identify new or previously missed hazards and failures in hazard controls. | Observations indicate potential new hazards not identified such as older apron areas in deteriorating condition, and lack of centerlines on these taxi lanes; newly painted hold bar markings and centerlines; and inoperable airfield signs. | D,V | UD | 1 | 3 | |
| 3.1.1.11 | PMG (c)(2) | D = Review Inspections and verify that they cover the whole facility quarterly.<br>I = Ask inspection team members how they ensure the whole facility is inspected quarterly. | Monthly inspections are performed with quarterly coverage of whole site (general industry). (More frequently if conditions change often.) [Appx F IID2] | Daily self inspections on airfield. Site inspections done periodically | D,I | PM | 2 | 3 | |

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D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 3.1.1.12 | AC 150/5200-37 | D = Review training records to verify that inspectors have appropriate training.<br>I = Ask inspectors what training they have received.<br>V = Walk with inspectors, perform an inspection and verify that they have the knowledge needed to identify hazards and controls. | Inspectors are qualified to recognize workplace hazards, particularly those particular to their industry. [appx F IID4] | Race events- Public safety does inspections prior to race and the personnel are qualified. For daily inspections, personnel receive refresher training as it relates to the ACM, runway incursions, self-inspections, ramp communications. Additional training appears warranted for airfield inspections and hazard recognition. | D,I | UD | 1 | 3 | |
| 3.1.1.13 | ICAO SMM | D = Review any requests for assistance made to state consultation services. | For small businesses in need of assistance, a request has been made for a consultation visit from the state Consultation program to get a full survey of existing and potential safety and health hazards in the workplace. | FAA performs a periodic Airport Certification Inspections. OSHA or state OSHA has not been requested. | D | PM | 2 | 3 | |
| 3.1.1.14 | PMG (c)(2)(ii) | D =Review written inspection reports and related hazard correction tracking information. | There are written inspection reports to document hazards discovered, responsibility assigned for correction, and the tracking of correction completion. | Yes for facility inspections. Tracking is informal. | D | PM | 2 | 3 | |
| 3.1.1.15 | PMG (c)(2) | Construction sites should be done at least weekly. D = inspection records. | More dynamic environments where conditions change frequency, require a more frequent inspection schedule. [Appx F IId1] | No documented inspection records for construction site observation. For race events, more frequent and in-depth inspections are accomplished on the airfield (public safety personal are in place full time during events). | D | PM | 2 | 3 | |
| 3.1.1.16 | AC 150/5200-37 | V = Compare the inspection form to the hazards observed during the site walkthrough. | The inspection process can identify the hazards observed throughout the facility. [Appx F IID7] | Observations such as extraneous airfield markings, sign lights not working, indicate additional attention needed during inspection process. | V | UD | 1 | 3 | |
| **Total:** | | | | | | | 29 | 48 | |
| | | | | | **Score:** | | ***60%*** | | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| **3.2 Non-Punitive Safety Reporting** | | *Element 3.2 (Reporting System): Reliable system for employees to notify management of conditions or practices that appear hazardous and to receive a timely and appropriate response serves a dual purpose. It gives management the benefit of many more points of observations and more experienced insight in recognizing hazards or other symptoms of breakdown in safety and health protection systems. It also gives employees assurance that their investment in safety and health is worthwhile. A system is reliable only if it ensures employees a credible and timely response. The response will include both timely action to address any problems identified and a timely explanation of why particular actions were or were not taken. Since the employer benefits from employee notices, effective management will not only guard against reprisals to avoid discouraging them but will take positive steps to encourage their submission. TED 8.4 CPTR III, II C.2.g; Appendix E, Section II.E, Appendix F, 4.3.4* | | | | | | | |
| 3.2.1.1 | AC 150/5200-37 | D = Review the procedure for employee reports of hazards. This system may recommend but must not require that the internal process be used before filing a complaint with OSHA. [TED 8.4 Appendix B Reports of Employee Safety and Health Problems / Concerns (A)]<br>I = Ask employees to give examples of reporting hazards and the process. (employee interview ) | A reliable system is provided for employees to notify management personnel, in writing, about conditions that appear hazardous. | Work order system is in place through TSS. Not used on daily basis . Tenants use verbal requests primarily. Before race events, work orders are used. Documentation not available for review. | D,I | UD | 1 | 3 | |
| 3.2.1.2 | AC 150/5200-37 | D = Review the procedure for employee reports of hazards regarding notifying employees of actions taken.<br>I = Ask employees who have reported hazards what type of response they received. (worker interview ) | A reliable system is provided for employees to receive timely and appropriate responses and employees are systematically informed of the results of their notifications. | During race events, the work order system thought facility at TSS is used. Unable to validate use of work order system | D,I | UD | 1 | 3 | |
| 3.2.1.3 | ACRP 4-05 | D = Review tracking records.<br>V = Walkout recent closed items to verify closure. | The status of all hazard reports (e.g., inspections, investigations, maintenance trends, etc.) are prioritized and assigned to include time frames and abatement follow-up. | No | D,V | DNM | 0 | 3 | |
| 3.2.1.4 | AC 150/5200-37 | D = Review tracking records.<br>V = Walkout recent closed items to verify closure. | Hazard reports (e.g., inspections, investigations, maintenance trends, etc.) that will not be completed in a timely manner document the interim protection. | No | D,V | DNM | 0 | 3 | |
| 3.2.1.5 | AC 150/5200-37 | I = Ask employees if they readily use the system. Ask how the system was communicated to them. (worker interview ) | Employees are encouraged to and use this reporting system as part of a non-punitive culture. | No formal system. Hazards are reported verbally. | I | DNM | 0 | 3 | |
| 3.2.1.6 | ACRP 4-05 | D = The procedures allows for the anonymous reporting of hazards. | A reporting system supporting anonymity is available, public and used. | No anonymous system. | D | DNM | 0 | 3 | |
| **Total:** | | | | | | | 2 | 18 | |
| | | | | | **Score:** | | ***11%*** | | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| **3.3 Tracking System** | | *Element 3.3 (Corrective Action Tracking): SMS tracking systems will be somewhat centralized, will capture all corrective actions generated from self-inspections, self-evaluations, incident investigations, employee reports of hazards, and other processes where corrective actions are necessary. Generally, the tracking system provides a reliable mans of communicating corrective action status and ultimate completion back to involved employees. [TED 8.4 CPTR III, II.C.3.f].*<br>*If a method exists, but it is not used and should be, maximum score is a UD.*<br>*If a method exists, and is used, but not effective, the maximum score is a PM.*<br>*The method needs to exist, be used and be effective or receive a M.* | | | | | | | |
| 3.3.1.1 | AC 150/5200-37 | D = Review correction report for closure.<br><br>I = Ask employees, committee members, supervisors, etc if reported hazards and action plans are corrected in a timely manner<br><br>V = Take examples of closed out corrective actions and verify closure. | A corrective action tracking method exists for employee reports of hazards. | ACM requirements for airfield surveillances identify hazards reported by maintenance and operations personnel. Discrepancies or defiencies are corrected on the spot or annotated to track until completion | D | UD | 1 | 3 | |
| 3.3.1.2 | ICAO SMM | | A corrective action tracking method exists for surveys and other safety initiatives (Insurance Company, regulators, critiques, etc.). | FAA inspections are tracked and replies are made initially. Chevron inspections are done and ADEM are performed quarterly. Tracking method is not in place but corrective action documentation is done with response letters. | D | UD | 1 | 3 | |
| 3.3.1.3 | AC 150/5200-37 | | A corrective action tracking method exists for inspection findings. | Corrective actions tracking method exists for airside and fueling service operations (mobile fuelers and fuel storage areas) | D | UD | 1 | 3 | |
| 3.3.1.4 | AC 150/5200-37 | | A corrective action tracking method exists for incident investigation findings. | No | D | DNM | 0 | 3 | |
| 3.3.1.5 | ICAO SMM | | A corrective action tracking method exists for safety maintenance work orders. | Manually through Talladega facilities section for race day events. In addition, the airport personnel submits safety maintenance work orders to management when hazards are identified that can not be corrected by the maintenace staff. | D | PM | 2 | 3 | |
| 3.3.1.6 | AC 150/5200-37 | | A corrective action tracking method exists for committee suggestions and assignments. | No | D | DNM | 0 | 3 | |
| 3.3.1.7 | AC 150/5200-37 | | a corrective action tracking method exists for Risk Mitigations. | No | D | DNM | 0 | 3 | |
| 3.3.1.8 | ICAO SMM | | a corrective action tracking method exists for Risk Reductions. | No | D | DNM | 0 | 3 | |
| 3.3.1.9 | ICAO SMM | | a corrective action tracking method exists for Objectives | No | D | DNM | 0 | 3 | |
| 3.3.1.10 | AC 150/5200-37 | | a corrective action tracking method exists for Indicators and Targets. | No | D | DNM | 0 | 3 | |
| 3.3.1.11 | ICAO SMM | | Corrective actions are assigned to responsible parties and prioritized. | From interviews, for race events, work orders are assigned and prioritized. No work orders available for review | D | UD | 1 | 3 | |
| 3.3.1.12 | AC 150/5200-37 | | Interim abatement and protection is established for non-immediate fixes. | Yes cones are placed on hazards identified to warn until corrective action is performed. Not documented or tracked | D,V | UD | 1 | 3 | |
| 3.3.1.13 | AC 150/5200-37 | | Hazards identified (inspections, incident investigations, safety work orders, surveys, committee/employee suggestions, etc.) are reported, tracked and corrected in a timely manner. [PMG(c)(3)(i)] | Race event - hazards are identified and corrected but not formally tracked. Daily activities - hazards are not fully identified and tracked to completion | D,I,V | UD | 1 | 3 | |
| 3.3.1.14 | ICAO SMM | | Follow-up/closure of action plans occurs to ensure abatement. | Yes for race events. For daily activities, follow-up not documented | V | UD | 1 | 3 | |
| **Total:** | | | | | | | 9 | 42 | |
| | | | | | **Score:** | | ***21%*** | | |

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D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| **3.4 Performance Indicators** | | *Elements 3.4. (Safety Performance Indicators and Targets): Metrics are the numbers themselves (Data) as well as a comparison to themselves with established targets. Leading metrics measure the inputs, outputs and processes themselves, not just outcomes like incidents and mishaps.* | | | | | | | |
| 3.4.1.1 | ACRP 4-05 | D = Check incidence reports. Mishaps include more than property damage or injuries. | Metrics are collected to measure the rate of mishaps and incidents | No | D | DNM | 0 | 3 | |
| 3.4.1.2 | ACRP 4-05 | D= Trend reports / mishaps | Incidence Rates are compared to previous years. Trends are improving. | No | D | DNM | 0 | 3 | |
| 3.4.1.3 | AC 150/5200-37 | D: Safety Programs include the SMS elements, such as Risk Assessment, inspections and Audits. | Leading metrics are developed to measure the volume of safety programs used to identify hazards and corrective actions. | No | D | DNM | 0 | 3 | |
| 3.4.1.4 | ICAO SMM | D = Check performance indicator reports | Metrics are collected to measure the volume of hazards identified. Volume is either increasing or appears sustainable. | No | D | DNM | 0 | 3 | |
| 3.4.1.5 | ICAO SMM | D = Check performance indicator reports | Metrics are collected to measure the closure rate of the hazard fixes and controls. Improvement in the rate is apparent. | No | D | DNM | 0 | 3 | |
| 3.4.1.6 | ICAO SMM | D = Check performance indicator reports | All critical programs are include in each of the above metrics, such as: employee reports of hazards, inspections, investigations, hazard analysis, special surveys, etc. | No | D | DNM | 0 | 3 | |
| 3.4.1.7 | AC 150/5200-37 | D = Performance Appraisals.<br>I= managers and supervisors | Metrics are assigned to operations management, and performance improvements are required for a positive performance evaluation. | No | D, I | DNM | 0 | 3 | |
| 3.4.1.8 | AC 150/5200-37 | D = Review Safety performance monitor process<br>V = Verify if performance effected written objectives | Safety performance monitoring are regularly reviewed and evaluation. Revise safety objectives to ensure effective and relevant to the organization's operation. | No | D | DNM | 0 | 3 | |
| 3.4.1.9 | AC 150/5200-37 | D = Review Safety performance indicators and targets | Performance indicators and targets addresses significant hazards and the possible risks | No | D | DNM | 0 | 3 | |
| 3.4.1.10 | AC 150/5200-37 | D = Review internal and external audits | Safety audit and Safety oversight activities identifies the overall safety performance of the organization. | No | D | DNM | 0 | 3 | |
| 3.4.1.11 | ICAO SMM | V = Take recently closed items to the workplace to verify closure. | Closure rates are verified. | No | V | DNM | 0 | 3 | |
| **Total:** | | | | | | | 0 | 33 | |
| | | | | | **Score:** | | ***0%*** | | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| **3.5 Trend Analysis** | | *Element 3.5 (Trend and Pattern Analysis): Trend analysis systems would include Pareto analysis of: the OSHA logs, accident/incident investigation causal factors and root causes, corrective actions, inspection findings, and safety related work orders. Trend analyses are utilized in the SMS process to identify and help define goals and objectives with corrective actions developed from the trend analysis. [TED 8.4, CPTR III, II.C.2.i; Appendix E, Section I.G.; Appendix F 4.3.6]. By monitoring trends in safety data, predictions may be made about future events. Emerging trends may be indicative of embryonic hazards. Statistical methods can be used to assess the significance of perceived trends. The upper and lower limits of acceptable performance against which to compare current performance may be defined.* | | | | | | | |
| 3.5.1.1 | ACRP 4-05 | D = Review the incident and OSHA logs to verify that this data is included in the trending. | Incident trends are analyzed over time, so that patterns with common causes can be identified and prevented. [PMG(c)(2)(C)(iv)] | Informally, management recognizes problem areas over time and implements measures for control. A couple example were the wildlife hazards to the airfield and a race event incident of man jumping 4 foot fence and accessing airfield lead to new seven foot fencing being installed. OSHA logs not maintained on site. There has been one reported work related accident since 2004. Aircraft related incidents are not trended. | D | DNM | 0 | 3 | |
| 3.5.1.2 | AC 150/5200-37 | D = Part 139 Inspection data. | Other trends - Part 139 inspection findings are also analyzed for trends. | Part 139 inspections are documented and maintained. Hazards identified daily during the inspections and tracked on the self-inpection checklist. Inspections consist of airside operations, markings, lighting, movement and non-movement areas. In addition, Part 139 manadatory fuel truck and fuel storage insepction are documented. A formal trending process has not been implemented at the airport. No analysis performed on identified hazards or risk. | D | PM | 2 | 3 | |
| 3.5.1.3 | 14 CFR Part 139 | D = Airfield surveillance generated worker orders and maintenance request forms | Other trends - employee reports, safety maintenance work orders - are also analyzed. | Part 139 airfield surveillance are performed both during day and nigthtime operations. When a hazard is identified that can not be corrected on the spot or within 24 hours a work order or maintenace request is generated. Data is not captured for trend analysis purposes. | D | PM | 2 | 3 | |
| 3.5.1.4 | AC 150/5200-37 | D = Review all available feedback from daily self-inspections, assessments, reports, safety risk analysis, and safety audits | Other trends - inspection (non-Part 139) findings are also analyzed. | Airport Manager reviews all daily inspections for findings, follow-up actions and corrections. There are no formal reports, safety riska nalysis generated from the review. | D | UD | 1 | 3 | |
| 3.5.1.5 | ACRP Report | D = Review mishap reports, inspections, trend analysis | Other trends -causal factors and root causes, are also analyzed. | No | D | DNM | 0 | 3 | |
| 3.5.1.6 | 14 CFR Part 139 | D = Airfield surveillance, refueling and fuel farm operations | Other trends -observations, driver safety, etc, are also analyzed. | Performed, yet not trended for safety or significate impact on any goals or objectives. | D | UD | 1 | 3 | |
| 3.5.1.7 | 14 CFR Part 139 | D = Review refueling and fuel farm surveillance reports | Other trends -completion and failure rate analysis of safety critical controls are also analyzed. | Reviews of the surveillances are performed both internal and external. Internal by the airport manager and external by FAA. Completeion of failure rates of safety critical controls are not tracked for trending. | D | UD | 1 | 3 | |
| 3.5.1.8 | AC 150/5200-37 | D = Review trend analysis corrective action plans which demonstrate continuous improvements.<br>I = Ask responsible parties methodology for identifying trends and developing corrective action plans. | Corrective action plans are developed and implemented to address any patterns that are identified. | No | D,I | DNM | 0 | 3 | |
| 3.5.1.9 | AC 150/5200-37 | D = Review goals and objective looking for connections to trend analysis reports.<br>I = Ask Airport Manager, Risk Manager and S&H Director, what trends and analysis led to current Goals and Objectives. | Corrective action plans are tied to making programmed changes and are used to develop annual objectives. [PMG (c)(2)(iv)] | No | D,I | DNM | 0 | 3 | |

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 3.5.1.10 | ICAO SMM | D = Review "published" trend analysis data to verify it exists.<br>I = Ask committee members if they have seen and understand trend analysis data. | Trend analysis records are maintained, shared with committees, and drive annual action plans. [PMG (c)(1)(viii)] | No | D,I | DNM | 0 | 3 | |
| **Total:** | | | | | | | 7 | 30 | |
| | | | | | **Score:** | | *23%* | | |
| **3.6 Integration of Maintenance and Emergency** | | *Element 3.6 (Maintenance and Emergency): of equipment and facilities is an especially important means of anticipating potential hazards and preventing their development. Planning, scheduling , and tracking preventative maintenance activities provides a systematic way of ensuring that they are not neglected and that unsafe short cuts do not occur resulting from improperly maintained equipment. Safety critical equipment is maintained and typically includes exhaust ventilation, machine guards, employee alarms, sprinklers, cranes, elevators, etc. [TED 8.4, CPTR III, II.C.3.e; Appendix F, 4.4.1]* | | | | | | | |
| **3.6.1 Preventative Maintenance** | | *Sub-Element 3.6.1 (Preventative Maintenance): Maintenance of equipment and facilities is an especially important means of anticipating potential hazards and preventing their development. Planning, scheduling , and tracking preventative maintenance activities provides a systematic way of ensuring that they are not neglected and that unsafe short cuts do not occur resulting from improperly maintained equipment. Safety critical equipment is maintained and typically includes exhaust ventilation, machine guards, employee alarms, sprinklers, cranes, elevators, etc. [TED 8.4, CPTR III, II.C.3.e; Appendix F, 4.4.1]* | | | | | | | |
| 3.6.1.1 | ICAO SMM | D = Review maintenance system or process for proactive measures [Preventative Maintenance (PM) schedule] | Maintenance hazards are detected/identified before they become incidents. [PMG(c)(3)(ii)] | Preventive maintenance on fueling vehicles is good. Limited on airfield hazards with regard to aprons. | D,I | UD | 1 | 3 | |
| 3.6.1.2 | ICAO SMM | D = Review records on safety-critical control maintenance | A survey of safety-critical control maintenance needs at the worksite has been conducted and is periodically updated and revised and included in the preventative/predictive maintenance system. [PMG (c)(3)(ii)] | Specific safety criteria survey not done on airport site. Many safety critical items in ACM. Airport Pre Race Checklist includes safety critical items. | D | UD | 1 | 3 | |
| 3.6.1.3 | ICAO SMM | D = Review reports on safety critical equipment (i.e., exhaust ventilation, fire protection, alarms and hanger suppression system) | Safety critical equipment, such as local exhaust ventilation, fire protection and alarm systems, fire suppression systems, etc. is part of this maintenance system and maintained to the manufacturer's schedule. | Safety critical equipment is inspected, including Fuel farm and refuelers trucks. Lighting and fire extinguishers are maintained. In addition, during race events agencies are responsible for safety critical equipment in there designated location. No suppression system for General Aviation hangars. | D | M | 3 | 3 | |
| 3.6.1.4 | ACRP Report | D = Review maintenance or work order request for repairs.<br>I = Ask how are maintenance request submitted and how is maintenance scheduled | Maintenance requests, safety work orders, and repair records and repair records are routinely analyzed to predict breakdown timing and to revise schedules as necessary. [PMG (c)(3)(ii)] | Yes for fuel trucks and fuel farm | D,I | PM | 2 | 3 | |
| 3.6.1.5 | ICAO SMM | D = Review hazard reporting process for scheduled maintenance<br>I = Ask are hazard reports part of the maintenance scheduling<br>V = Verify the reports are submitted and scheduled | Hazard reports submitted are part of maintenance scheduling and resource utilization. | No | D,I,V | DNM | 0 | 3 | |
| 3.6.1.6 | ACRP Report | D = Review equipment maintenance schedule | Process and procedures in place to ensure calibration and maintenance of monitoring equipment | The only equipment that require calibration are the fuel trucks. The fuel meters are scheduled well in advance and calibrated. | D | M | 3 | 3 | |
| **Subtotal** | | | | | | | 10 | 18 | |
| | | | | | **Score:** | | *56%* | | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| **3.6.2 Emergency Preparedness** | | *Sub-Element 3.6.2 (Emergency Preparedness): Planning and training for emergencies is essential in minimizing the harmful consequences of an accident or other threat if it does occur. If personnel are not so thoroughly trained to react to emergencies that their responses are immediate and precise, they may expose themselves and others to greater danger rather than reduce their exposure. The nature of potential emergencies depends on the nature of site operations and its geographical location. The extent to which training and drills are needed depends on the severity and complexity of the emergencies, which may arise. Anticipated emergencies may include: fire, spills, explosion, natural disasters, terrorist threat, civil disturbance, earthquake, tornado, critical shutdowns, injuries and illness, etc. [TED 8.4, CPTR III, III.C.3.h; Appendix E, Section III.A; Appendix F, 4.4.1]* | | | | | | | |
| 3.6.2.1 | 14 CFR Part 139 | D = Formal Airport Emergency Plan (AEP) written<br>V = Verify document identify airport related (type) emergencies. | Emergency plans and preparations are known and documented for all anticipated emergencies. [PMG(c)(3)(iii)] | The Talladega Municipal Airport Emergency Plan is in draft form and revisions are under consideration which is more detailed. There is currently not an approved AEP for the airport. The copies were not signed and dated, nor approved by FAA. | D,V | UD | 1 | 3 | |
| 3.6.2.2 | 14 CFR Part 139 | D = Review Airport Emergency Plan (AEP)<br>I = Ask worker about the Emergency plan. | Plans to communicate requirements to the worksite are effective and in writing and a schedule for conducting emergency drills annually is documented. | The airport has conducted one table top exercise and plans are to complete a full drill in spring of 2009 | D,I | UD | 1 | 3 | |
| 3.6.2.3 | 14 CFR Part 139 | D = Review documentation on training exercise and drills.<br>I = Ask when the worker last performed in a emergency drill or exercise | Training and unannounced drills covering all employees are conducted annually for all emergency responses so that they will be second nature. | Table top provided some training to participants which included airport personnel, public safety, EMA, fire marshal, local police, etc. | D,I | UD | 1 | 3 | |
| 3.6.2.4 | 14 CFR Part 139 | D = Review Airport Emergency Plan (AEP) for explosion type exercises (i.e., bomb threat, aircraft fire) | Emergency plans take into account potential explosions and are effective. | The draft versions do include | D | UD | 1 | 3 | |
| 3.6.2.5 | ACRP 4-05 | D = Emergency Plan cover fire scenarios | Emergency plans take into account likely fire sources and scenarios and are effective. | The draft versions do include | D | UD | 1 | 3 | |
| 3.6.2.6 | ACRP 4-05 | D = Emergency Plan cover toxic chemicals scenarios | Emergency plans take into account the release of toxic chemicals and are effective. | Not included and because of Aniston chemical waste disposal, this should be included in the plan. | D | UD | 1 | 3 | |
| 3.6.2.7 | ACRP 4-05 | D = Emergency Plan cover inclement weather conditions<br>I = Ask worker actions required during inclement | Emergency plans take into account likely weather conditions and are effective. | The draft versions do include. But need more specifics for communications needed and shelter in place requirements. | D,I | UD | 1 | 3 | |
| 3.6.2.8 | ACRP 4-05 | D = Emergency Plan cover natural disasters (sheltering procedures) | Emergency plans take into account natural disasters and are in writing and effective. | The draft versions do include | D | UD | 1 | 3 | |
| 3.6.2.8 | ACRP 4-05 | D = Emergency Plan cover natural disasters (sheltering procedures) | Emergency plans take into radiation exposures and are in writing and effective. | The new draft includes | D | DNM | 0 | 3 | |
| 3.6.2.9 | ACRP 4-05 | D = Emergency Plan cover bomb threat | Emergency plans take into account bomb threats and are in writing and effective. | The draft versions do include bomb threats. Before each race bomb sweeps are conducted by law enforcement | D | UD | 1 | 3 | |
| 3.6.2.10 | ICAO SMM | D = Written procedures for potential public emergency situations and incidents | Emergency plans take into account other emergency situations (terrorists, civil disturbances, etc.) and are in writing and effective. | The new draft includes | D | DNM | 0 | 3 | |
| 3.6.2.11 | ICAO SMM | D = Review AEP, Emergency Response Plan (ERP) or Airport Certification Manual for Incident commander role and responsibilities. | Written procedures are established to cover responsibility (e.g., incident commander) for handling each kind of emergency and are effective. | New draft is more complete | D | UD | 1 | 3 | |
| 3.6.2.12 | 14 CFR Part 139 | D = Review written plan for emergencies shut down and start up procedures for equipment (i.e., airfield, airport, and back generators) | Written procedures are established to cover emergency shut down and start up of equipment and are effective. | The draft versions do include | D | UD | 1 | 3 | |
| 3.6.2.13 | ICAO SMM | D = Review written Emergency Response Plan (ERP), Mutual-Aid or Support Agreements. | Emergency medical care and follow-up and are in writing and effective. | The draft versions do include | D | UD | 1 | 3 | |

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 3.6.2.14 | ICAO SMM | D = Review documented critiques. | Events and drills are critiqued. Critiques are documented and recommendations for improvement are implemented and completed. | The draft versions do include | D | UD | 1 | 3 | |
| 3.6.2.15 | ICAO SMM | V = Emergency Response system established. | The emergency response system is adequately designed, implemented, and communicated to both employees and to the community. | The draft versions do include | V | UD | 1 | 3 | |
| 3.6.2.16 | ICAO SMM | D = Review AEP or Mutual Agreements for local emergency response services (airport authorities, fire fighters, police, ambulances, medical agencies, etc); I = Management. Do outside agencies have written agreements. | Agreements established with agencies outside of the airport and procedures established to address outside responders participation | Mutual Aid Agreements are in place with City of Talladega for outside agencies. | D,I | M | 3 | 3 | |
| 3.6.2.17 | ACRP 4-05 | D = Written documentation for periodic review of SMS implementation | The emergency procedures periodically reviewed as part of the management review of SMS | No SMS requirements established. All applicable parties will conduct plan review sessions at least once every 2 years. Approximately six weeks prior to the review session, airport management will provide all agencies who are involved in the plan, a copy of the plan to review. | D | DNM | 0 | 3 | |
| **Subtotal** | | | | | | | 17 | 54 | |
| | | | | | **Score:** | | *31%* | | |
| **3.6.3 Integration of Operations** | | *Sub-Element 3.6.3 (Integration of Operations): Planning and training for emergencies is essential in minimizing the harmful consequences of an accident or other threat if it does occur. If personnel are not so thoroughly trained to react to emergencies that their responses are immediate and precise, they may expose themselves and others to greater danger rather than reduce their exposure. The nature of potential emergencies depends on the nature of site operations and its geographical location. The extent to which training and drills are needed depends on the severity and complexity of the emergencies, which may arise. Anticipated emergencies may include: fire, spills, explosion, natural disasters, terrorist threat, civil disturbance, earthquake, tornado, critical shutdowns, injuries and illness, etc. [TED 8.4, CPTR III, III.C.3.h; Appendix E, Section III.A; Appendix F, 4.4.1]* | | | | | | | |
| 3.6.3.1 | ICAO SMM | D = Review Emergency Response Plan for essential training requirements. | Emergency Response procedures written to the size and scope of the airport operations and identify potential emergency situations and incidents. | TSS Plan does not include coordination with Airport AEP. | D | UD | 1 | 3 | |
| 3.6.3.2 | 14 CFR Part 139 | D = Review emergency response team training documents | Emergency response team properly trained | No trained response team for the aircraft incidents at the airport. Aircraft Rescue Firefighter (ARFF) training required. Talladega Fire Department has one ARFF Trained persons per shift, personnel are scheduled to receive Live Fire training in early 2009. Airport employees are not trained in emergency response as the airport relies on public safety departments. | D | DNM | 0 | 3 | |
| ***Subtotal*** | | | | | | | 1 | 3 | |
| | | | | | **Score:** | | *33%* | | |
| **Total:** | | | | | | | 28 | 75 | |
| | | | | | **Score:** | | *37%* | | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| **3.7 SMS Evaluation** | | *Element 3.7 (SMS Evaluation): A Comprehensive program evaluation is essential periodically to evaluate the whole set [i.e., all elements under Management Leadership, Employee Involvement, Worksite Analysis, Hazard Inventory & Control and Training) of safety and health management means, methods, and processes, to ensure that they are adequate to protect against the potential hazards at the specific worksite. The evaluation determines whether policies and procedures are implemented as planned and whether in practice they have met the objectives set for the program goal of effective safety and health protection. When either performance or the objectives themselves are found inadequate, revisions are made. Without such a comprehensive review, program flaws and their interrelationship may not be caught and corrected. [TED 8.4, Chapter III, IIC.1.d.]* | | | | | | | |
| 3.7.1.1 | ACRP 4-05 | D: Assessment Guide<br><br>Annual Report<br><br>Corrective Action Plans<br><br>I: Assessment Team members: Verify their qualifications as well as the scope of the evaluation.<br><br>V: Verify completion of some of the action plans. | There is a system in place for critically reviewing and evaluating all SMS Elements periodically. [PMG (c)(1)(viii)] | Part 139 requires the FAA to performs an annual airfield certification inspections. FAA provides a written report identfying compliance with inspections, training, and documentation. FAA also evaluate the effectiveness of Part 139 implemented process; such as ARFF response capabilities to an aircraft emergencies. Corrective Actions are generated from the report if there are identified deficiencies or discrepancies. | D | UD | 1 | 3 | |
| 3.7.1.2 | ICAO SMM | | An SMS evaluation has been performed within the last year. | No | D | DNM | 0 | 3 | |
| 3.7.1.3 | ICAO SMM | | Interviews are conducted periodically at all levels to determine how well the SMS program elements are understood and implemented. | Airport personnel are not aware of SMS program elenments. | D,I | DNM | 0 | 3 | |
| 3.7.1.4 | ICAO SMM | | Annual SMS evaluation reviews written safety policies and programs, the ACM, procedures & programs that address the potential hazards of the workplace. | The ACM procedure and program requirements address hazards and risk associated with airfield operations. Potential hazards associated with other areas of the airport are not addressed in detail as the Part 139 requirements. | D | UD | 1 | 3 | |
| 3.7.1.6 | ICAO SMM | | The periodic program evaluation results in a written report of strengths and weaknesses of each element. | No | D | DNM | 0 | 3 | |
| 3.7.1.7 | ICAO SMM | | The periodic program evaluation includes specific written recommendations for improvement. | No | D | DNM | 0 | 3 | |
| 3.7.1.8 | ICAO SMM | | The periodic program evaluation includes documentation of follow-up actions to satisfy the recommendations found in prior evaluation reports. | No | D | DNM | 0 | 3 | |
| 3.7.1.9 | ICAO SMM | | Programs improvement and/or objectives not meet are revised. [PMG (c)(1)(viii)] | No | D | DNM | 0 | 3 | |
| 3.7.1.10 | ICAO SMM | | Each SMS element and section is evaluated. | No | D | DNM | 0 | 3 | |
| 3.7.1.11 | ICAO SMM | | The SMS evaluation includes document and record review, worker and management interviews and surveys, as well as physical observations of conditions, behaviors and work practices. | No | D | DNM | 0 | 3 | |
| 3.7.1.12 | ICAO SMM | Qualified personnel typically means having some training expertise and some independence from site operations. | The evaluation is conducted by qualified personnel, corporate staff, or other outside resources. | No | D | DNM | 0 | 3 | |
| **Total:** | | | | | | | 2 | 33 | |
| | | | | | **Score:** | | ***6%*** | | |
| **3.0 Safety Assurance** | | | | Section Total | | | ***23%*** | | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| **4.0 Safety Promotion** | | *Section 4.0 (Safety Promotion): The component Safety promotion is composed of two elements: Training and education and Safety communication. The organization shall develop and maintain a safety training programme that ensures that personnel are trained and competent to perform the SMS duties. The scope of the safety training shall be appropriate to each individual's involvement in the SMS. The organization shall develop and maintain formal means for safety communication which ensures that all personnel are fully aware of the SMS, conveys safety critical information, and explains why particular safety actions are taken and why safety procedures are introduced or changed.* | | | | | | | |
| **4.1 Training and Education** | | *Element 4.1 (Training and Education): An established training program that provides to the level of competency required to maintain excellent safety levels. This apply to general work functions at the airport and to SMS functions as well. It also may apply to contractors and service providers who need to be aware of at least a minimum level of airport SMS requirements and emergency procedures. Moreover, safety training and education are essential in creating a positive safety culture within the airport organization, which is vital to develop an effective SMS. A training file should be developed for each employee, including management, to assist in identifying and tracking employee training requirements and verifying that the personnel have received the planned training.* | | | | | | | |
| 4.1.1.1 | AC 150/5200-37 | D = Formal training needs survey conducted (related to knowledge and skills required to perform task safely) | A needs survey has been performed resulting in a list of required courses for each person/position. | No formal internal survey performed. | D | DNM | 0 | 3 | |
| 4.1.1.2 | AC 150/5200-37 | D = Review training curriculum for supervisors and managers.<br>I = Ask Managers and Supervisors. Is there a safety training curriculum. | A training curriculum exists for Managers and supervisors and covers all required training. | Airport Manager receives fueling and fire safety training | D,I | PM | 2 | 3 | |
| 4.1.1.3 | AC 150/5200-37 | | A training curriculum exists for employees and covers all required training. | Curriculum for fueling safety is conducted utilizing "NATA Safety First." Additional, training is provided by Airport manager using approved training curriculum for airfield operations. | D,I | PM | 2 | 3 | |
| 4.1.1.4 | AC 150/5200-37 | D = Formal Job Specific Training<br>I = Ask workers. Are they trained on hazards of the work assignment | Workers are trained in specific hazards, safety rules and practices related to their work assignments, before they assume new duties. | Yes for refueling operations. No JSA's. Safety meetings are performed monthly. | D,I | UD | 1 | 3 | |
| 4.1.1.5 | AC 150/5200-37 | D = Review training documents | People responsible for being involved in programs, such as hazard analysis, inspections, etc. have been trained to do so. | Formal training provided on fueling and airfield inspection. No hazard analysis training provided. | D | UD | 1 | 3 | |
| 4.1.1.6 | AC 150/5200-37 | D = Review attendance records | Training attendance is documented and verifies successfully meeting the training schedules. | Yes | D | M | 3 | 3 | |
| 4.1.1.7 | AC 150/5200-37 | D = Revise training curriculum | Training curriculum is up-to-date, specific to work place operations and procedures, trends, hazards and controls. | Yes | D | M | 3 | 3 | |
| 4.1.1.8 | ACRP 4-05 | D = Formal trainer qualification in-place | Trainers are qualified (specific knowledge and expertise) in the subject area. | Management completes line service safety training. Train-the-trainer type training provided. | D | PM | 2 | 3 | |
| 4.1.1.9 | ACRP 4-05 | D = Formal Committee member training | Workers who participate on committees have been trained on their responsibilities and committee functions. [PMG (c)(4)(i)] | No committees. | D | DNM | 0 | 3 | |
| 4.1.1.10 | ICAO SMM | D = Emergency awareness training<br>I = Ask worker. What are your responsibilities in an emergency. | All personnel are aware of their responsibilities for each type of emergency | No documentation that training on AEP is done with airport employees before race. | D,I | DNM | 0 | 3 | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 4.1.1.11 | ICAO SMM | D = Formal Incident commander training | Incident commanders are trained to their scenarios, specific responsibility and this training is specific. | Public safety agencies are trained and airport manager received informal training. Airport Manager needs to attend a formal incident commander course. | D | PM | 2 | 3 | |
| 4.1.1.12 | ICAO SMM | D = Review Emergency Response Plan (ERP) and Airport Certification Manual (ACM) | Response personnel (e.g., first aid, rescue, spills, etc.) are specifically trained to site scenarios, procedures and this is effective. | Yes for the Airport and TSS | D | M | 3 | 3 | |
| 4.1.1.13 | ICAO SMM | D = Review Personal Protective Equipment (PPE) Training program.<br>I = Ask worker. Are they trained on PPE | Personnel are trained in the care, use and maintenance of PPE devices. | Yes hearing protection, reflect vest are used for race events. No PPE for electrical safety. | D,I | UD | 1 | 3 | |
| 4.1.1.14 | ACRP 4-05 | D = Formal SMS indoctrination training for supervisors, managers, employees.<br>I = Ask Management and worker. Is there a requirement for employees to attend SMS training. | All employees are trained to understand SMS elements and it is effective. | No | D,I | DNM | 0 | 3 | |
| **Total:** | | | | | | | 20 | 42 | |
| | | | | | **Score:** | | | ***48%*** | |
| **4.2 Design and Delivery** | | *Element 4.2 (Communication Design and Delievery) Processes and procedures must be in place to allow for communication among operational personnel and with the organization's management. Organizations must make every effort to communicate their objectives, as well as the current status of the organization's activities and significant events. Training requirements and activities should be documented for each area of activity within the organization.Training programs should be adapted to fit the needs and complexity of the organization. Safety training within an organization must ensure that personnel are trained and competent to perform their safety management duties. The amount of safety training should be appropriate to the individual's responsibility and involvement in the SMS. The provision of appropriate training to all staff, regardless of their level in the organization, is an indication of management's commitment to an effective SMS. Safety training and education should consist of the following: a documented process to identify training requirements; a validation process that measures the effectiveness of training; initial (general safety) job-specific training; indoctrination/initial training incorporating SMS, including Human Factors and organizational factors; and recurrent safety training.* | | | | | | | |
| 4.2.1.1 | ICAO SMM | V = Safety training presentation | Subject Matter Experts are used in the development and presentation of safety training. | For fueling activities the airport uses a certified program. TSS brings in speakers for safety meetings. | V | PM | 2 | 3 | |
| 4.2.1.2 | ICAO SMM | V = Course development participants | Training course development involves management and employees. | Airport Manager is responsible for training topics with TSS inputs. No employee inputs encouraged for improvement. | V | UD | 1 | 3 | |
| 4.2.1.3 | ICAO SMM | D = Review Lesson Plans | Goals and objectives for training are clearly defined in lesson plans. | No lesson plans | D | DNM | 0 | 3 | |
| 4.2.1.4 | ICAO SMM | D = Review safety and health training plan | Safety and health training is incorporated into other training about performance requirements and job practices. | Informally and in safety meeting. | D | UD | 1 | 3 | |
| 4.2.1.5 | ICAO SMM | D = Review training evaluation plans | Plans are for evaluating the program are incorporated into the training lesson plans. | No | D | DNM | 0 | 3 | |
| 4.2.1.6 | ICAO SMM | I = Training plan process for course development | Training topics or jobs are explained and employee knowledge is determined at the start of training. | No | I | DNM | 0 | 3 | |
| 4.2.1.7 | ICAO SMM | I = Ask trainer does the order of training presentation stimulates audience. | The order of training presentation simulates the actual job as close as possible. | Line service training includes towing and marshalling. It does simulate actual job. Note: electrical safety training does not fully incorporate airfield electrical safety. | I | PM | 2 | 3 | |

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D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| 4.2.1.8 | ACRP Report | I = Ask worker if their ideas or feedback provided to trainers | Personnel with knowledge or workplace hazards are encouraged to offer their ideas to improve training. | No | I | DNM | 0 | 3 | |
| 4.2.1.9 | ACRP Report | D = Formal test or examine provided.<br>I = Ask instructor if oral questioning performed. | When training ends, employee performance is evaluated by formal testing, oral questioning, observation, or other means. | Formal training programs do include testing. Line service training includes formal testing , scoring, and documentation. | D,I | PM | 2 | 3 | |
| 4.2.1.10 | ICAO SMM | I = Ask instructor is performance checks conducted during session | Performance is checked during practice periods to help evaluate the employees' understanding of what was taught in the training session. | Observation checklists area available in the NATA Safety 1st program | I | M | 3 | 3 | |
| 4.2.1.11 | ACRP | D = Written evaluations performed on course for effectiveness. | Evaluations are conducted to verify that desired learning was achieved and if the training session should be offered again. | Written evaluations are performed | D | M | 3 | 3 | |
| 4.2.1.12 | ICAO SMM | D = Review evaluation for job performance | Evaluations are conducted to determine if employee job performance improved after training. | Not indicated | D | DNM | 0 | 3 | |
| 4.2.1.13 | ICAO SMM | D = Review training program | Training program modifications can be traced to training course evaluations. | Not indicated | D | DNM | 0 | 3 | |
| **Total:** | | | | | | | 8 | 18 | |
| | | | | | **Score:** | | ***44%*** | | |
| | | | | | | | | | |
| **4.3 Competency** | | *Element 4.3 (Competency and Continuous Improvement): Assurance builds on the principle of the continuous improvement cycle. In much the same way that quality assurance facilitates continuous improvements in quality, safety assurance ensures control of safety performance – including regulatory compliance – through constant verification and upgrading of the operational system. These objectives are achieved through the application of similar tools: internal evaluations and independent audits (both internal and external), strict document controls and on-going monitoring of safety controls and mitigation actions.* | | | | | | | |
| 4.3.1.1 | ACRP 4-05 | D = Review documents for evidence of continuous improvement process | Continuous improvement is an inherent part of the safety objectives at all levels of the organization | Evidence of continuous improvements for race events was noted, i.e., new radios, staff increases, live fire extinguisher training and claims investigators on site were added improvements. | D | M | 3 | 3 | |
| 4.3.1.2 | ACRP 4-05 | V = Verify reviews are conducted to identify implementation of process.<br>I = Ask management how the process is implemented | Regular and periodic, planned reviews are conducted regarding organization safety processes and performance, with the objective of identifying opportunities for improvement. | No | V,I | DNM | 0 | 3 | |
| 4.3.1.3 | ACRP 4-05 | V = Verify monitor system is established. | Major decisions and actions aimed at improving safety are monitored for their effectiveness. | Not formally | V | UD | 1 | 3 | |
| 4.3.1.4 | ACRP 4-05 | D = Review internal safety audits | Managers are kept informed of the internal safety reviews, planned and implemented risk control actions. | Informally communicated for the race. TSS management staff has weekly management meetings. Safety is not included. | D | UD | 1 | 3 | |
| 4.3.1.5 | ACRP 4-05 | D = Review documented annual reviews. | There is an annual management review of the entire Safety Management System (SMS). | No | D | DNM | 0 | 3 | |
| 4.3.1.6 | ACRP 4-05 | D = Review performance measure documentation.<br>I = Management. Ask if results are distributed. | Results of regular, periodic and planned management reviews on safety processes and performance are documented. | No | D,I | DNM | 0 | 3 | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| ID | Ref | Instruction | Criteria | Finding | S | R | PR | PA | P |
|---|---|---|---|---|---|---|---|---|---|
| 4.3.1.7 | ACRP 4-05 | D = Formal self-inspection documentation.<br>I = Workers. Are workers involved in self-assessment | SMS self assessments are periodically revised to find out areas where improvements are necessary. | No | D,I | DNM | 0 | 3 | |
| **Total:** | | | | | | | 5 | 21 | |
| | | | | | **Score:** | | *24%* | | |
| **4.4 Lessons Learned** | | *Element 4.4 (Lessons Learned):* | | | | | | | |
| 4.4.1.1 | ICAO SMM | D = This does not mean that the actual investigation records must be provided, just the results. | The results of incident investigations are to be made available to all covered employees on request. | Some are available through government agencies, i.e. NTSB, FAA, OSHA. But this is not communicated to the employees. | D,I | DNM | 0 | 3 | |
| 4.4.1.2 | ICAO SMM | I = Ask employees if accident investigation results are communicated. (worker interview ) | The report that is made available to employees should, at a minimum, describe the incident and what corrections have been made to avoid future occurrences. | Not written | D,I | DNM | 0 | 3 | |
| 4.4.1.3 | ICAO SMM | | The corrective actions communicated address both immediate and systems issues that will be or are addressed. | No | D | DNM | 0 | 3 | |
| 4.4.1.4 | ICAO SMM | | Communication of lessons learned is in a timely manner. | No | D | DNM | 0 | 3 | |
| 4.4.1.5 | ICAO SMM | | Lessons learned are shared with other departments. | No evidence | D | DNM | 0 | 3 | |
| 4.4.1.6 | ICAO SMM | | Lessons learned from the site are shared among departments and tenants. | Not formalized | D | DNM | 0 | 3 | |
| 4.4.1.7 | ICAO SMM | | Lessons learned from other facilities are shared among departments and tenants. | No | D | DNM | 0 | 3 | |
| 4.4.1.8 | ICAO SMM | | Action plans routinely result from lessons learned. | No | D | DNM | 0 | 3 | |
| 4.4.1.9 | ICAO SMM | | Resulting action plans are assigned and tracked to closure. | No | D | DNM | 0 | 3 | |
| **Total:** | | | | | | | 0 | 27 | |
| | | | | | **Score:** | | *0%* | | |
| **4.5 Recognition / Encouragement** | | ***Element 4.5 (Recognition and Encouragement): Procedures for safe work which are understood and followed by all affected parties, as a result of positive reinforcement… resulting from active participation. Recognition are not primarily based on incidence rates, and encourage the reporting process. PMG (c)(3)*** | | | | | | | |
| 4.5.1.1 | PMG (c)(3) | D = Recognition program announcement and records. | The recognition program is based on the proactive accomplishment of safety programs, not the number of injuries and illnesses. | No, Airport board does not provide award or incentive programs. Talladega speedway does not have a recognition program. | D | DNM | 0 | 3 | |
| 4.5.1.2 | PMG (c)(3) | D = Recognition program announcement and records. | There are both individual and department based recognition criteria. | No written recognition program. | D | DNM | 0 | 3 | |
| 4.5.1.3 | ACRP 4-05 | D = Department Scorecards. | Department scorecards are used as part of the recognition program. | No | D | DNM | 0 | 3 | |
| 4.5.1.4 | AC 150/5200-37 | D = Recognition program announcement and records. | The recognition program is consistently applied among committee members and all personnel. | No formal announcements for recognition. Periodically luncheons are provided during and after race events at no cost to the airport personnel. There is no safety committee at Talladega airport. | D | UD | 1 | 3 | |
| 4.5.1.5 | PMG (c)(3) | D = Recognition program announcement and records. | The recognition program includes "On the spot" awards based on finding people doing things right. | No, but verbal "on-the spot" recognition is performed when employee provide information regarding a safety concern or demonstrate safety awareness. | D | UD | 1 | 3 | |

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

| *ID* | *Ref* | *Instruction* | *Criteria* | *Finding* | *S* | *R* | *PR* | *PA* | *P* |
|---|---|---|---|---|---|---|---|---|---|
| 4.5.1.6 | PMG (c)(3) | I = workers | Workers feel encouraged to participate based in part on the recognition program. | Perception recieved from the employees during the survey is that recognition is not formally established , however, the airport staff recent received letters of appreciation for their outstanding contributions towards the success of airport operations and manaement. | I | PM | 2 | 3 | |
| 4.5.1.9 | PMG (c)(3) | D = rewards proactive involvement rather than just injury rate achievements.<br>I = workers are encouraged to participate. | The recognition program does not discourage the reporting of incidents. | Workers feel that they are enncouraged to identify safety concerns at the airport. The injury rate at the airport is lost due to the amount of personnel and proactive initatives relating to the race events. | D,I | UD | 1 | 3 | |
| **Total:** | | | | | | | 5 | 21 | |
| | | | | | **Score:** | | *24%* | | |

| **4.0 Safety Promotion** | Section Total | *28%* | |
|---|---|---|---|

S=Source; R=Response; PR=Points Received; PA=Points Available; P=Priority
D=Documents, Procedures Records; I=Interviews; V=Visual Observation

# Attachment 6

# SMS Implementation Cost Estimate

| Attachment 6 SMS Implementation Cost Estimate (In addition to current level of effort) | | | Cost Estimate (Man hours) | |
|---|---|---|---|---|
| **Section/ Element** | **Assessment** | **Comments** | **Initial** | **Ongoing** |
| **Safety Policy & Objectives (7)** | 20% | Total | 68 | 68 |
| Policy | 3% | Part 139 does not require a safety policy. Airport does not have a formal written safety policy statement. | 4 | - |
| Objectives | 19% | Part 139 objectives are to ensure aircraft can safety land and depart without incident or accident, but do not require formal documented objectives. There are no formal safety objectives or targets written for the special race event or regular operations, even though safety is a primary concern of all parties. TMA uses a pre-race checklist as a guide to ensure that the airport is setup safely and operationally ready to handle aircraft at the race time. | 10 | 24 |
| Responsibility and Authority | 26% | Part 139, Line of Succession of Airport operational responsibilities are required to be identified in the ACM. Talladega Municipal Airport Board has defined written responsibilities for the airport manager and key personnel. During race events, safety is supported and executed as a priority by NATC stakeholders (i.e., Talladega Speedway, NASCAR, etc) and Public Safety Agencies which provides fire rescue, medical care, security, environmental management, etc. | 20 | - |
| Accountability | 22% | Part 139, Talladega ACM requires accountability of airport staff and key agencies to adhere to safety requirements. Accountability and authority are addressed in the ACM, Airport Emergency Plan and Security Plan which are coordinated and reviewed by all airport agency personnel. Airport Management has not established written procedures to hold staff accountable to any safety metrics, targets, or objectives. | 10 | 24 |
| Resources | 48% | Part 139 and the airport ACM identify the resources required to operate the airfield to FAA requirements; such as aircraft rescue and line services equipment, personnel, and training. Funds are requested and allocated as needed for construction or maintenance on hangars by the Airport Board. Some resources are provided to maintain FAA standards. Resources are allocated to address race event expenses by NATC. Operational cost and airfield maintenance costs are the responsibility of the FBO. Airport staffing is increased dramatically (from 4 to over 50) for races. There are two elements of the Part 139 that have not been full implemented; recent Class IV requirements for ARFF live-fire training and an approved AEP. | (not part of SMS) | - |
| Documentation | 22% | Part 139 requires the airport ACM, which is a description of the system for maintaining records such as daily airfield self-inspections, training, quarterly fuel farm and mobile fuel truck inspections. Talladega has a manual (hard copy) system for recordkeeping of documentation. In addition, pre-event checklists are established for planning race events. The ACM is the documentation. | 24 | 20 |
| Committees | 0% | Part 139 and ACM does not mandate a safety committee to be established. There is no designated or appointed committee that functions as a safety committee at the airport. | N/A | - |

| Attachment 6 SMS Implementation Cost Estimate (In addition to current level of effort) | | | Cost Estimate (Man hours) | |
|---|---|---|---|---|
| **Section/ Element** | **Assessment** | **Comments** | **Initial** | **Ongoing** |
| **Safety Risk Management (6)** | 28% | Total | 340 | 200 |
| Requirements | 67% | Part 139 and the airport ACM is the requirement for airport operation through daily airside surveillances. These are the primary regulatory drivers for an airport,. | 40 | 10 |
| Hazard Identification | 33% | Part 139 and the ACM pre-identify a number of hazards and identify required controls. It does not prescribe a process to identify other hazards through an internal and external process. However, 1) Internally, the airport performs daily surveys (i.e., runway and taxiway markings, NAVAIDs, directional signs, lighting and fuel services operations to identify hazards associated with the airfield; 2) External hazard identification occurs annually by the FAA. For race weeks there are additional informal processes established; such as, a Pre-Race checklist that has been developed to identify potential hazards and areas of concerns prior to the event. The checklist is used as a proactive tool to ensure that the airport is set up safely and operationally to handle aircraft at the race time. No formal hazard identification written process is established. | 40 | 20 |
| Hazard Analysis | 13% | Part 139 and the airport ACM does not require a hazard analysis to be performed beyond assessing emergency response activities. Race week provides experienced personnel to perform informal analysis process of airfield operations. Public safety and security, and emergency management performs worksite analyses specific to their operations prior to the race events. For example, emergency management and the fire department perform an analysis for the staging of vehicles to meet response time and personnel availability in case of an emergency. However, there is no documentation maintained at the airport. | 150 | 40 |
| Risk Assessment | 14% | Part 139 and the ACM require undocumented risk assessments of airfield operations. For example; wildlife hazard management, airside obstructions, and foreign object debris (FOD). There is no formal written risk assessment procedures developed to risk rank hazard tasks or operations for subsequent risk reduction and control verification. Part 139 requirements are evaluated and performed by the FBO and the FAA. Rain water runoff and fuel spills are evaluated periodically by the Alabama Department of Environmental management (ADEM). | Incl in above | - |
| Risk Management | 17% | Part 139 and the ACM does not require a formalize risk management process. Risk management concepts and processes are performed through daily and quarterly inspections that monitor compliance with Part 139 requirements. When a hazard or risk to an aircraft or facility is identified, procedures are in place to eliminate recurrence of hazards. For example; an unsatisfactory condition or hazard to an aircraft relating to the airfield may require a Notice to Airmen (NOTAMS) /Condition report to be transmitted and available to pilots. During race week, pre-checklists are communicated and close coordination between the stakeholders help improve the | 10 | 50 |
| Investigations | 20% | Part 139 and the airport ACM address formal investigation procedures. As part of the AEP, actions are identified to be taken in case of an incident at the airport (i.e., aircraft accident, bomb incident, structural fire, nature disaster, etc.) Race event, incidents are investigated and documented when airport staff is informed. Accident reports are filed at the International speedway corporation in Daytona, Florida. Aircraft accidents are investigated and reports maintained by NTSB and FAA. Injuries and incidents are investigated and records are maintained by International speedway corporation (ISC) in Daytona, Florida. No formal written program is established for the airport. | 100 | 80 |

| Attachment 6 SMS Implementation Cost Estimate (In addition to current level of effort) | | | Cost Estimate (Man hours) | |
|---|---|---|---|---|
| **Section/ Element** | **Assessment** | **Comments** | **Initial** | **Ongoing** |
| **Safety Assurance (7)** | 23% | Total | 325 | 344 |
| Inspections and Self-Auditing | 60% | Part 139 and the ACM require procedures for conducting a self-inspection program. Daily inspections are conducted on the airfield and when an unusual condition is present, such as construction activities or meteorological conditions, which may affect safe aircraft operations. In addition, inspections occur immediately after an accident or incident. Daily ACM inspections are completed and documented. Terminal facility inspections are performed monthly. Findings are reviewed by the airport manager and followed-up to completion. No documented tracking system is established for terminal inspections. Non-regulatory controls identified by the Risk Assessment process have not yet been integrated into the inspection process. | 100 | 50 |
| Non-Punitive Safety Reporting | 11% | Part 139 and the airport ACM do not address non-punitive safety or near-miss reporting. A work order system is in place during races; hazards are reported verbally. The airport submits work orders for carpentry, electrical and plumbing to NATC. Personnel are encouraged to report unsafe conditions. No formal mechanism exists for encouraging near-miss reporting. | 10 | 24 |
| Tracking Systems | 21% | Part 139 and the airport ACM requires airside inspection to be performed and documented. The hazards identified by maintenance and operations are reported. Discrepancies or deficiencies are corrected on the spot or annotated to be tracked until completion. The airport maintains records for personnel training (emergency, fueling, and movement safety area), fueling agent inspections, self-inspection, accident and incidents, and airport conditions. During the race event, hazards are identified and corrected but not formally tracked unless placed in the work order system. | 25 | 50 |
| Performance Indicators | 0% | Part 139 and the airport ACM identify performance by success of meeting the basic FAA goal – no accidents or incidents. No established system is in place to check leading performance indicators and targets or to address significant hazards, possible risks or lack of control implementation. Data is not collected for trending or establishing targeted goals or objectives. | Part of Goals and Objectives | 20 |
| Trend Analysis | 23% | Part 139 and the airport ACM do not directly identify or require a trending process; however, the airport performs assessments of airfield operations. For example; wildlife hazard abatement for bird strikes (seasonal migrations) or aircraft accident reporting. Informally, management recognizes problem areas over time and implements preventative measures. Documented trending is not performed. Daily activity hazards are not fully identified or tracked where hazards are corrected on the spot. However for the SMS process, a system for trending to determine a logical approach to counteract the any change in risk to safe operations is not developed. | 40 | 80 |
| Integration (Maintenance / Emergency) | 37% | Part 139 and the airport ACM identifies maintenance requirements of airfield equipment; both FAA and airport owned. Emergency procedures are addressed in the AEP. Safety critical equipment is inspected daily (i.e., fuel farm, fuel trucks, etc.) as identified by the ACM. Fire Extinguishers are inspected monthly by airport staff and every 6 months by an outside company prior to each race event. Emergency response activities, the FBO, and public safety agencies (medical, fire marshal, local police, etc) were involved in a recent airport emergency plan table top exercise review. | Already a part of 139 | 20 |
| SMS Evaluation | 6% | Part 139 and the airport ACM address some elements of the SMS during FAA evaluations (i.e., authority and training, organizational structure, self-inspections, documentation, emergency preparedness, etc). There currently is no system in place for critically reviewing and periodically evaluating all SMS elements. | 150 | 100 |

| Attachment 6 SMS Implementation Cost Estimate (In addition to current level of effort) | | | Cost Estimate (Man hours) | |
|---|---|---|---|---|
| **Section/ Element** | **Assessment** | **Comments** | **Initial** | **Ongoing** |
| **Safety Promotion (5)** | 28% | Total | 220 | 108 |
| Training and Education | 48% | Part 139 and the airport ACM is detailed and specific regarding airside training and education requirements. Curriculum for line services is conducted utilizing "NATA Safety First." For race events, familiarization training and orientation are provided by public safety agencies. The Fire department performs fire extinguisher training. Additional personnel (flagmen and aircraft marshallers) are trained on roles and responsibilities from NATA safety first. The training is documented and tracked for personnel other than airport staff employees. ARFF training records are maintained at the fire stations; however, it has been noted in the FAA report that the ARFF personnel have not received live-fire training. Additional training is required for incident commander, accident, and incident reporting. | 120 | 24 |
| Design and Delivery | 44% | Part 139 and the airport ACM require a formal training program for ARFF personnel, fueling agents, pedestrians and ground vehicles in movement area and safety areas. All airside required training includes formal testing, scoring, and documentation. Race event safety training is informally conducted in the monthly meetings held by NATC. | incl above | incl above |
| Competency | 24% | Part 139 and the airport ACM require personnel to be proficient and certified (i.e., live drills, air traffic tower operators, airfield hazard recognition). Evidence of continuous improvements for race events was noted, i.e., implementation of new radio system, increase in staff, live fire extinguisher training, and on-site claims investigators were added improvements. | 40 | 12 |
| Lessons Learned | 0% | Part 139 and the airport ACM addresses lesson learned through events identified during surveys and evaluations. Some are available through government agencies, e.g., NTSB, FAA, EPA, and OSHA. There is no formalized process established for information to be communicated to the employees. Information is shared with airport staff as it relates to airport operations. | 10 | 24 |
| Recognition/ Encouragement | 24% | Part 139 and the airport ACM do not formally promote or encourage safety participation or a recognition process. The Airport board does not provide award or incentive programs for safety reporting. NATC does not have a recognition program. Supervisors do provide verbal recognition for outstanding dedication to safety awareness during race events. Airport staff has been presented certificates of application and letters of appreciate from the Airport Board. Airport staff does feel moderately encouraged to report. | 50 | 48 |
| | | Total Additional Man hours for SMS Implementation | 953 | 720 |